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‘Drove my Chevy to the levee but the levee was dry’²: prosecuting water theft in the Murray Darling Basin of Australia

Introduction

Much discussion of environmental crimes is at the macro level, leading to a focus on concepts such as ecocide and environmental crimes against humanity but environmental crimes at the micro level may also be significant. Accordingly, this article explores the criminalisation of certain water related conduct – conduct that includes water theft – in the domestic jurisdiction of New South Wales (NSW), Australia.

Water theft (a generic term, covering several water offences) has become a serious issue as water resources are placed under greater stress from increasing demand and reduced availability.³ In Australia, the driest inhabited continent on earth, this is particularly so.⁴ Consequently, the development of law and governance that effectively shares, distributes and regulates the taking of this valuable resource in a fair, efficient and equitable manner, in the context of climate change, is important. One approach that has been employed to help achieve these ends is to criminalise unauthorised abstractions (for example, without or in contravention of a water licence or other related governance instrument). But is this approach working? Is criminalisation the answer? Will it help ensure better resource

¹ Janice Gray would like to thank UNSW Law for funding support and James Clark for his research assistance.

² D McLean, *American Pie*

(1971) <<https://www.google.com/search?q=lyrics+american+pie+by+don+mclean&oq=lyrics+American+Pie&ags=chrome.2.0l6.8683j0j8&sourceid=chrome&ie=UTF-8>> accessed 15 August-2019.

³ Re Australia, see Australian Competition and Consumer Commission (ACCC), *ACCC Inquiry into Water Markets in the Murray-Darling Basin* (Issues Paper, 2019) Issue 1 <<https://www.accc.gov.au/system/files/Murray-Darling%20Basin%20water%20markets%20inquiry-Short-form%20Issues%20Paper.pdf>> accessed 23-October-2019.

⁴ Alex Gardner, Richard Bartlett, Janice Gray and Rebecca Nelson, *Water Resources Law* (2nd edn, LexisNexis 2018) 4; Geoscience Australia, *National Location Information: Deserts* <<https://www.ga.gov.au/scientific-topics/national-location-information/landforms/deserts>> accessed 12 December 2019; as at December 2019 Murray-Darling Basin capacity was at 32% (7,181 of 22,746 Gigalitres), see Murray Darling Basin Authority (MDBA), *Water in Storages* (11 December 2019) <<https://www.mdba.gov.au/managing-water/water-storage>> accessed 10 December 2019; ‘Water restrictions will take effect when dam levels in the region reach 45%’ NSW Government, ‘Level 2 water restrictions to start across Sydney’ (21 November 2019) <<https://www.nsw.gov.au/news-and-events/news/level-2-water-restrictions-to-start-across-sydney/>> accessed 16 December 2019; December, 2019 storage levels were at 44.4% (1,153,372 ML of 2,596,150 ML) WaterNSW, ‘Greater Sydney’s Dam and Rainfall Levels’ (17 December 2019) <<https://www.watarnsw.com.au/supply/Greater-Sydney/greater-sydneys-dam-levels>> accessed 17 December 2019.

sharing/allocation and compliance? And how effective can criminalising water theft be, if the institutional structures designed to support law's implementation and enforcement, prove wanting?

In an attempt to answer some of these questions, the following discussion begins with some background on the Murray Darling Basin (MDB) itself and is followed by material setting out key state and federal legal and regulatory measures designed to govern water abstractions and sharing (so as to support reduced consumption), the breach of which, in many cases, now sounds in the criminal justice system. The article also considers inadequate monitoring, regulator inaction and the lack of political and other will that resulted in a failure to prosecute water theft. It references two specific cases (the Barlow case⁵ and the Harris case⁶) where the parties, who were irrigators in the MDB, have eventually been prosecuted for a number of breaches which, in lay terms, may be called water theft. In both cases, the prosecution alleged that the parties took water in a manner contrary to the relevant authorisations and in so doing committed a criminal act; an offence. This discussion invites focus on the key underlying question, noted above, why criminalise?

The water narrative that unfolds also flags a number of tensions including the tensions between sharing and selfishness; markets and public administration, individualism and the common good, and transparency and secrecy; tensions with which effective governance must deal. Criminalisation is but one governance tool to address these tensions and help reduce unacceptable conduct. If the criminalisation tool is found wanting, alternative or complementary tools may need to be employed. In that context, Arlie Hochschild's sociological immersion approach, which aims to reveal the deep story of the 'other', is proffered.

Background

The Murray Darling Basin

In order to contextualise discussion of water theft in the MDB, it is helpful to understand something of that river basin. The MDB is the largest river system in Australia, spanning more than 77,000 kilometres of mostly connected rivers.⁷ Its northern-most point is in the state of Queensland (QLD), but the Basin also extends south and west into NSW, the Australian Capital Territory, Victoria and South Australia (SA). It takes its name from the two major rivers: The River Murray and the Darling River.

⁵ *WaterNSW v Barlow* [2019] NSWLEC 30.

⁶ *WaterNSW v Harris* decision withheld until March 2020. See also *Inland Rivers Network v Harris* NSWLEC, hearing commencing 9 March 2020 <https://www.edonsw.org.au/irn_v_harris_another> accessed 10 December 2019.

⁷ Murray Darling Basin Authority (MDBA), *Discover the Basin* <<https://www.mdba.gov.au/discover-basin>> accessed 23 October 2019.

Most food for the export⁸ and domestic markets is produced in the MDB.⁹ Such production is heavily dependent on the 9,200 irrigated agriculture businesses across the Basin.¹⁰ In 2017-18, more than 70% of all Australian agricultural water use occurred within the MDB.¹¹ Perhaps unsurprisingly, irrigated agriculture has become problematic because it uses such alarmingly high volumes of water.¹²

The high levels of water consumption associated with irrigated agriculture in particular, have also contributed to environmental harm and a Basin that is in crisis.¹³ The MDB, for example, suffers from increased salinity, sedimentation, acidity and of course, low water availability.¹⁴ Indeed, in early 2019 some of the Murray-Darling NSW tributaries stopped flowing. They ran dry.¹⁵ Meanwhile, Indigenous elders have claimed that poor MDB health has affected Indigenous people's access to food and water, leading to a 'second wave of

⁸ Around two thirds of Australia's agricultural products are exported. See Department of Agriculture, *Export* (4 November 2019) <<https://www.agriculture.gov.au/export>> accessed 6 December 2019.

⁹ About one third of Australia's national food is produced in the MDB. See Murray Darling Basin Authority (MDBA), *Murray Darling Basin: Overview* (July 2014) <<https://www.mdba.gov.au/sites/default/files/pubs/MDBA-Overview-Brochure.pdf>> accessed 9 December 2019.

¹⁰ Murray Darling Basin Authority (MDBA), *Discover the Basin: Key Facts* <<https://www.mdba.gov.au/discover-basin>> accessed 23 October 2019. See also Janice Gray, 'Ecological Integrity as an Alternative Frame for the Water, Unconventional Gas and Food Nexus' (2019) 59 *Jurimetrics* 10.

¹¹ 'In 2017-18 in the Murray Darling Basin...1.5 million hectares of agricultural land was irrigated (up 8%) [and]...6.8 million ML of water was applied (up 7%)', Australian Bureau of Statistics, *Water Use on Australian Farms* (April 2019) <<https://www.abs.gov.au/ausstats/abs@.nsf/mf/4618.0>> accessed 9 December 2019.

¹² Rupert Quentin Grafton, 'Policy review of water reform in the Murray-Darling Basin, Australia: the "do's" and "do 'nots"' (2019) 63 *Australian Journal of Resource Economics* 116. <<https://doi.org/10.1111/1467-8489.12288>> accessed 24 October 2019. Note that in 2017-2018 in relation to water for agricultural production 'Australian farms used a total of 10.5 million megalitres (up 5%) of water taken from various sources including: 3.9 million ML from irrigation channels or pipelines (up 6%) ...,3.0 million ML of water from rivers, creeks or lakes (up 4%), ...

2.2 million ML of groundwater (up 19%)'...1.2 million ML from on farm dams or tanks (down 12%) ...

158 thousand ML from recycled or reused water from off farm sources (up 15%)'...[and]

54 thousand ML from a town or country reticulated mains supply (down 25%)', see Australian Bureau of Statistics, *Water Use on Australian Farms 2017-2018* (April 2019)

<<https://www.abs.gov.au/ausstats/abs@.nsf/mf/4618.0>> accessed 6 December 2019.

¹³ Other causes of environmental harm include drought and land clearances, see NSW Government, 'Six main risks to Murray-Darling Basin water' (July 2006) <<https://www.dpi.nsw.gov.au/content/archive/agriculture-today-stories/ag-today-archives/july-2006/six-main-risks-to-murray-darling-basin-water>> accessed 16 December 2019.

¹⁴ Murray-Darling Basin Authority (MDBA), 'Climate Change and the Murray-Darling Basin Plan' (Discussion Paper, February 2019) <<https://www.mdba.gov.au/sites/default/files/pubs/Climate-change-discussion-paper-Feb-19.pdf>> accessed 12 December 2019; Murray-Darling Basin Authority (MDBA), *Salinity*

<<https://www.mdba.gov.au/managing-water/salinity>> accessed 24 October 2019; Murray-Darling Basin Authority (MDBA), *Drought in the Murray-Darling Basin* (Australian Government)

<<https://www.mdba.gov.au/managing-water/drought-murray-darling-basin>> accessed 24 October 2019; See also Barry T Hart, 'The Australian Murray-Darling Basin Plan: Challenges in its Implementation (Part 1)' (2016) 32 *International Journal of Water Resources Development* 819, 819.

¹⁵ Such as the Narran, Namoi and the Barwon. See, Anne Davies and Lorena Allam, 'When the River Runs Dry: the Australian Towns Facing Heatwave and Drought' *The Guardian* (Sydney, 25 January 2019) <<https://www.theguardian.com/australia-news/2019/jan/25/when-the-river-runs-dry-the-australian-towns-facing-heatwave-and-drought>> accessed 24 October 2019.

genocide'.¹⁶ Against this backdrop and due to continuing demand in the face of scarcity, water has become a very valuable and highly sought-after resource in Australia.¹⁷

Concern about serious environmental degradation and harm (including their effect on future human activity and indeed on human survival) has generated numerous approaches to regulate abstractions and in turn, reduce water consumption.¹⁸ Those approaches included licensing, water markets, water trading, water plans and sustainable diversion limits (SDLs). Such approaches have tended to impact on all users, but those who use the most water, such as irrigators,¹⁹ have arguably been more affected.

Reducing Consumption – State-based approaches

Both state-based and Commonwealth approaches to allocating water sustainably and reducing consumption, have been introduced. Key state-based approaches include the extensive legislative reforms passed by individual states, around the turn of the last century (the millennium reforms).²⁰ Those reforms were designed to manage water resources more effectively by way of a water resources planning system that in NSW includes Water Sharing Plans (WSPs) operating in conjunction with a system of licensing, trading and markets. WSPs are very significant in the context of unauthorised water take (theft) because the plans include some of the key requirements with which there must be compliance for the take to be regarded as authorised. Two elements that a WSP must include and which are relevant to water theft are: (a) the rules for *trading* water held under water access licences (WALs) – known as dealing rules – and; (b) the requirements for water *extraction* under WALs.²¹ To avoid unauthorised take, it will, with few exceptions, be necessary to hold a water entitlement or an allocation²² (and comply with the relevant conditions).

A water entitlement is the generic name given to a perpetual share or percentage of water in a variable consumptive pool.²³ In NSW, an entitlement is known as a WAL.²⁴ Meanwhile, the actual annual allocation of water that an entitlement holder receives is, in NSW, known generically as an allocation. Authorised abstractions are dependent on compliance with the

¹⁶ For example, Muruwari and Budjiti man, Bruce Shillingsworth, artist and 'Water for Rivers' activist in ABC, Q&A (28 October 2019) <<https://www.abc.net.au/qanda/2019-28-10/11624850>> accessed 26 December 2019.

¹⁷ 'During the 2018–19 water year, average monthly allocation prices increased from approximately \$230 per ML (July 2018) to above \$550 per ML (June 2019).' See, Aither, *2019 Water Markets Report* (22 September 2019) <<https://www.aither.com.au/2019-water-markets-report/>> accessed 13 December 2019.

¹⁸ Council of Australian Governments, *Intergovernmental Agreement on Implementing Water Reform in the Murray Darling Basin* (August 2019) 1, 5–6 <<https://www.coag.gov.au/sites/default/files/agreements/iga-on-implementing-water-reform-mbd-9-august-2019.pdf>> accessed 17 December 2019; John Tisdell, John Ward and Tony Grudzinski, 'The Development of Water Reform in Australia' (*Cooperative Research Centre for Catchment Hydrology*, May 2002) iii

<<https://ewater.org.au/archive/crcch/archive/pubs/pdfs/technical200205.pdf>> accessed 15 December 2019.

¹⁹ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 143 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019 (Walker Report).

²⁰ See the *Water Management Act 2000* (NSW) (WMA); *Water Act 2000* (Qld); *Natural Resources Management Act 2004* (SA) and; *Water Act 1989* (Vic).

²¹ WMA s20(1).

²² There are exceptions for example water for domestic and stock use; WMA s 52.

²³ Alex Gardner, Richard Bartlett, Janice Gray and Rebecca Nelson, *Water Resources Law* (2nd edn, LexisNexis 2018) chs 12 and 25.

²⁴ Note that the terminology is inconsistent, varying between different Australian jurisdictions.

category and conditions of the WAL (covering the share, for example), the Works Approval (covering the specific type of pump, for example), Water Use Approval (covering the purpose/use for which the abstraction is possible, for example), the WSP (covering timing, for example) and other instruments that may be in place, such as those creating embargoes. Unauthorised take (and use) may be an offence under the relevant legislation,²⁵ bringing that conduct within the domain of criminal law. Whether abstractions are authorised is primarily an issue for the regulator, who among other things is responsible for monitoring abstractions and checking compliance. A separate Natural Resources Regulator, established under the *Natural Resources Access Regulator Act 2017* (NSW), has responsibility for compliance and enforcement of water management legislation in NSW.²⁶

If a person or business does not have the necessary entitlement or allocation, one will need to be purchased on the market. A complex system of water trading, introduced around the turn of the last century, makes this possible although there have been some unintended outcomes. As an allocative tool, trading was, for example, supposed to move water resources from low to high value use and consequently reduce over-consumption.²⁷ Hence, it was expected that cotton growers would find their water-thirsty crops too expensive and instead move to growing less water intensive crops.²⁸ However, the evidence indicates that a shift away from cotton growing has not occurred.²⁹ Despite this, trading (along with the market more generally) continues to remain the key allocative tool in NSW.

Reducing Consumption – Commonwealth Approach

Following the state-based turn of the century legislative reforms, the *Water Act 2007* Cth³⁰ (WA) was also passed. As a Commonwealth instrument its passage was dependent on a Commonwealth assertion of legislative powers and a referral of state powers³¹ because, in Australia, the Constitution provides that states, rather than the Commonwealth, have the right to make laws for water.³² The WA provides ‘overall governance and policy mechanisms’ but it operates in tandem with state laws and it is the (Basin) state laws (some

²⁵ In NSW the relevant legislation is the *Water Management Act 2000* (NSW) (WMA).

²⁶ Department of Industry, ‘About NRAR’ <<https://www.industry.nsw.gov.au/natural-resources-access-regulator/about-nrar>> accessed 24 October 2019. Formerly the relevant NSW regulator was WaterNSW.

²⁷ Alex Gardner, Richard Bartlett, Janice Gray and Rebecca Nelson, *Water Resources Law* (2nd edn, LexisNexis 2018) ch 23.

²⁸ For a partial critique of water trading see Janice Gray, “Dollars and Dreams: Legal Aspirations and Report Cards in the Murray Darling Basin of Australia” in Laura Westra, Prudence Taylor and Agnès Michelot (eds), *Confronting Ecological and Economic Collapse: Ecological Integrity for Law, Policy and Human Rights* (Routledge 2013).

²⁹ In 2017-2018 ‘[i]rrigated cotton production and pastures for grazing were key contributors [to water consumption] with increases in both [the] area irrigated and volume of water applied’. In 2017-2018, 7.2 million megalitres were applied to crops with cotton accounting for 2.8 million megalitres over 359 thousand hectares (up 10%). In the MDB specifically in 2017-2018 2.6 million megalitres were applied to cotton over 320 thousand hectares (up 4%). Quotation and figures from:

Australian Bureau of Statistics, *Water Use on Australian Farms 2017-2018*

<<https://www.abs.gov.au/ausstats/abs@.nsf/mf/4618.0>> accessed 6 December 2019.

³⁰ *Water Act 2007* (Cth) (WA).

³¹ Alex Gardner, Richard Bartlett, Janice Gray and Rebecca Nelson, *Water Resources Law* (2nd edn, LexisNexis 2018) 95.

³² Alex Gardner, Richard Bartlett, Janice Gray and Rebecca Nelson, *Water Resources Law* (2nd edn, LexisNexis 2018) 95.

of which are discussed above) that largely implement the ‘management and enforcement of water policy on the ground.’³³

The WA strongly embraces sustainability in its objects³⁴ and is ‘more generally green friendly’ legislation, factors that have led to much criticism in some quarters and even a (thwarted) constitutional challenge.³⁵ Importantly, the Act mandates the creation of the MDB Plan (MDBP) which is effectively an operational or implementational tool. It is meant to translate the WA’s objects into a form that allows those objects to be realised and accordingly provides for ‘Basin-wide environmental objectives for water dependant ecosystems of the Murray-Darling Basin’.³⁶ Meanwhile the MDB Agreement, entered into between Basin States and the Commonwealth is designed, among other things, ‘to give effect to the Basin Plan, the Water Act and State water entitlements’.³⁷

The MDBP relies on several measures to help fulfil its objects. Three important measures are: (a) Sustainable Diversion Limits (SDLs);³⁸ (b) buy backs of water entitlements (held under licences) for the benefit of the environment; and (c) infrastructure/efficiency programs to facilitate reduced water take. In this article we focus on SDLs because it is the preservation of these limits which water theft potentially threatens.

SDLs

The MDBP provides for ‘the establishment and enforcement of environmentally sustainable limits on the quantities of surface water and ground water that may be taken’.³⁹ Those limits are known as SDLs.

SDLs are, therefore:

‘the ultimate quantitative control imposed by the Water Act [and are] intended to cap the volume of Basin water taken for consumptive use, such as for irrigated agriculture (subsec 22(1) item 6 and sec 23). [The SDL] must, in turn, ‘reflect an environmentally sustainable level of take’ (ESLT).⁴⁰ Meanwhile, the ESLT has at its

³³ Justice Nicola Pain, ‘Administering Water Policy in the Eastern States of Australia — Administrative and Other Challenges’ (AIAL National Administrative Law Conference, Canberra, 18-19 July 2019) <<http://www.lec.justice.nsw.gov.au/Documents/Speeches%20and%20Papers/PainJ/Pain%20J%20%20Administering%20Water%20Policy%20in%20the%20Eastern%20States%20of%20Australia%20-%20Administrative%20and%20Other%20Challenges.pdf>> accessed 13 December 2019.

³⁴ WA (2007) s 3. In particular, see WA (2007) s 3(d)(i)–(ii).

³⁵ Daniel Montoya, *The Basin Plan: Legal Debates and Developments* (NSW Parliamentary Library Research Service eBrief, April 2012) <<https://www.parliament.nsw.gov.au/researchpapers/Documents/the-basin-plan-legal-debates-and-developments/The%20Basin%20Plan%20-%20legal%20debates%20and%20developments.pdf>> accessed 24 October 2019.

³⁶ WA (2007) s 20(c).

³⁷ WA (2007) sch 1 cl 1.

³⁸ WA (2007) ss 21 and 22.

³⁹ WA (2007) s 20(c).

⁴⁰ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 20 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019. (Walker Report); See also MDBP s 21. Note ESLT is defined in MDBP s 4(1). SDLs are ‘[t]he maximum long-term annual average quantities of water that can be taken, on a sustainable basis, from: (a) the Basin water resources as a whole; and (b) the water resources, or

core 'the level of take beyond which key environmental values would be compromised'.⁴¹

Put another way, SDL are mechanisms that, through their relationship with the ESLT, limit or reduce how much water may be taken from the MDB.⁴² Water take includes: removal by pumping or siphoning; reducing the flow by stopping, impeding or diverting water; releasing water from a lake or wetland; and permitting water to flow from a well or course.⁴³ Water take also covers storing water if ancillary to any of the above methods.

The Basin SDLs were set by the Murray Darling Basin Authority (MDBA)⁴⁴ which also was responsible for developing the MDBP itself.⁴⁵ As a preliminary step in this exercise, the MDBA released the MDB Guide (followed later by the MDB Draft Plan and ultimately the MDBP). The 2010 Guide contained a provisional SDL but irrigators found it particularly unpalatable. They regarded that SDL as being too generous to the environment and too harsh on them. They strenuously objected to their level of take being so limited and reacted vehemently, symbolically burning copies of the Guide outside a rural MDBA office.⁴⁶ Their protest attracted nation-wide attention. It captured an element of disdain for the MDBP that is arguably reflected in the acts of water theft which have later followed.⁴⁷

Eventually, the MDBA succumbed under pressure from irrigators and adjusted the SDL down, meaning that less water had to stay in the MDB to benefit the environment (and consequently more could be taken out). Ultimately, the MDBA assessed the total surface water SDL for the Basin at 10,873 gigalitres and in order to meet that level of take, the MDBA concluded 2,750 gigalitres per year would need to be recovered from the baseline diversion level.⁴⁸

particular parts of the water resources, of each water resource plan area.' (WA s 22, Item 6.) Accordingly, there is a Basin wide SDL and a SDL for each water resource.

⁴¹ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 19 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019 (Walker Report).

⁴² WA s 23.

⁴³ WA s 4; Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 20 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019 (Walker Report).

⁴⁴ The MDBA was established under WA s 171.

⁴⁵ WA s 41.

⁴⁶ Ray Ison and Philip Wallis, 'Planning as Performance: The Murray-Darling Basin Plan' in Daniel Connell and Rupert Quentin Grafton (eds), *Basin Futures: Water Reform in the Murray-Darling Basin* (ANU ePress 2011) 399–411 <<http://press-files.anu.edu.au/downloads/press/p115431/pdf/ch25.pdf>> accessed 9 July 2019.

⁴⁷ That dissatisfaction with the MDBP continues may be seen in the 'Can the Plan's' blockade of the Australian parliament in 2019. Later in that year, a deal was reportedly struck between the Australian government and 'Can the Plan' protesters, who were seeking a revised Plan that gave less water to the environment and more to others, including irrigators and farmers; Cath Sullivan and Clint Jasper, "'Can the Plan' Protesters Say They Have Brokered a Deal with Federal Water Minister and Mike Keelty' (ABC News, 3 December 2019) <<https://www.abc.net.au/news/rural/2019-12-03/protesting-irrigators-say-water-sharing-to-be-reviewed/11759388>> accessed 26 December 2019.

⁴⁸ See Justice Nicola Pain, 'Administering Water Policy in the Eastern States of Australia — Administrative and Other Challenges' (AIAL National Administrative Law Conference, Canberra, 18-19 July 2019) <<http://www.lec.justice.nsw.gov.au/Documents/Speeches%20and%20Papers/PainJ/Pain%20J%20-%20Administering%20Water%20Policy%20in%20the%20Eastern%20States%20of%20Australia%20->

How the revised SDL of 2,750 gigalitres was actually arrived at is problematic and is arguably linked to the same irrigator dissatisfaction that drives a disregard for compliance; a disregard that potentially sounds in water theft. In setting the SDL recovery, the MDBA should have taken into account the best available science but according to the South Australian Royal Commission Report on the Murray Darling Basin (Walker Report), it did not.⁴⁹ The MDBA did not, for example, rely on projections that factored in climate change, although the Commonwealth's key research agency, the Commonwealth Scientific Investigation and Research Organisation (CSIRO) had undertaken, and made available, useful research on climate change.⁵⁰ Further, the Walker Report concluded that the SDL was arrived at by 'political compromise', meaning that it was arrived at in an unlawful manner (a manner not pursuant to the requirements of the WA) and in so doing it 'risks compromising the key environmental priorities prescribed in the WA'.⁵¹

Theft, SDLs and unauthorised water take

Awareness that more has to be done with less water has put significant pressure on irrigators but the inescapable reality is that it is impossible to improve ecological health without some pain.⁵² A 'legislated national program of reduced water for irrigation'⁵³ has been passed and as a consequence, it has been noted that there may be 'grievous' effects

[%20Administrative%20and%20Other%20Challenges.pdf](#) > accessed 13 December 2019; Murray-Darling Basin Authority, 'Discover Surface Water' (Australian Government) <<https://www.mdba.gov.au/discover-basin/water/discover-surface-water>> accessed 24 October 2019.

⁴⁹ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 219 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019 (Walker Report).

⁵⁰ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 55 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019 (Walker Report).

⁵¹ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 53, 188 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019 (Walker Report). Note the allocative and compliance framework of which SDLs are part was intended to commence operation in July 2019 but at the time of writing it remained inoperative because water resource plans had not yet been accredited. See Justice Nicola Pain, 'Administering Water Policy in the Eastern States of Australia — Administrative and Other Challenges' (AIAL National Administrative Law Conference, Canberra, 18-19 July 2019) <<http://www.lec.justice.nsw.gov.au/Documents/Speeches%20and%20Papers/PainJ/Pain%20J%20%20Administering%20Water%20Policy%20in%20the%20Eastern%20States%20of%20Australia%20-%20Administrative%20and%20Other%20Challenges.pdf>> accessed 13 December 2019; Murray-Darling Basin Authority, 'Discover Surface Water' (Australian Government) <<https://www.mdba.gov.au/discover-basin/water/discover-surface-water>> accessed 24 October 2019. See also Department of Agriculture, *Murray-Darling Basin Plan* (Australian Government) 26 <<http://agriculture.gov.au/water/mdb/basin-plan>> accessed 1 July 2019, where it is noted that 'The Commonwealth Minister for Agriculture ...granted extensions for various proposed plans to be given to the MDBA by 31 December 2019'.

⁵² Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 18 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019 (Walker Report).

⁵³ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 18 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019 (Walker Report).

on 'pre-existing or planned private enterprises'.⁵⁴ However, this is no reason to cut back the legislated irrigated water use reduction program or tolerate its circumvention through water theft. In fact, causing the national program to 'falter or halt' 'in the face of demonstrated consequences of reduced water for irrigation' 'would be against the central requirements of the Water Act'.⁵⁵ As Walker reminds us '[a]s enacted law⁵⁶ the solemn and binding expression of our [i.e. Australians'] democratic will was (and remains), that we have taken too much and must stop doing so'.⁵⁷ Put another way, accessing water by the 'back door' (that is, by stealing it), runs counter to our democratic will, as captured in the WA.

Yet, against this backdrop, some irrigators have taken water *outside* or beyond the legal and regulatory systems designed to reduce water take and in turn, consumption. Their conduct flies in the face of, or flouts serious (even if not always effective) attempts to govern water resources in an equitable and sustainable manner. Their conduct may also potentially contribute to environmental harm and threaten ecological integrity.

Having said this, it is, however, worth taking irrigators' concerns and grievances seriously. Understanding (but not necessarily agreeing with) their concerns may lead to better water governance. Many irrigators see SDLs as highly contentious and have, since their introduction, resisted their own (irrigators') level of take being reduced by such mechanisms.⁵⁸ Accordingly, SDLs have engendered much disquiet and, in some cases, anger. One irrigator lobby group, Can the Plan, expressed its anger by blockading the Australian parliament in December 2019. The group claimed that communities and livelihoods were suffering because the MDBP returns too much water to the environment (particularly, during periods of drought) and does not allow irrigators enough water to grow food and

⁵⁴ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 18 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019 (Walker Report).

⁵⁵ Content of paragraph from Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 18 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019. (Walker Report).

⁵⁶ in the form of the *Water Act* 2007 (Cth) (WA).

⁵⁷ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 20 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019 (Walker Report).

⁵⁸ See Kath Sullivan, "'Can the Plan' Convoy Heads to Canberra Calling for End to Murray Darling Basin Plan' (ABC News, 2 December 2019) <<https://www.abc.net.au/news/2019-12-02/can-the-plan-convoy-converges-on-canberra/11751398>> accessed 26 December 2019; see also

NSW Irrigators' Council Media Release, *NSW Irrigators' Council Calls Upon MDBA to Rule Out Extra 2,000 Billion Litre Water Grab* (12 September 2019) <<https://www.nswic.org.au/wordpress/wp-content/uploads/2019/09/2019-09-10-PEW-Plan-Limits.pdf>> accessed 6 December 2019 refers to concerns about more water than that presently stipulated under SDLs being made available to the environment. The NSW Irrigators' Council also refers to the pain that SDLs historically created when they reduced water availability for irrigators. It stated 'Since 2012 irrigation farmers have carried the burden of the Plan with the negative impact on food and crop production across NSW...The heavy lifting from NSW irrigation farmers under the Basin Plan has been devastating, but it has all but finished. Water recovery is complete in almost every valley, and we are now complying with the Sustainable Diversion Limits.' See NSW Irrigators' Council Media Release, *NSWIC Response to NSW's Threat to Withdraw from the Basin Plan* (25 November 2019) <<https://www.nswic.org.au/wordpress/wp-content/uploads/2019/11/2019-11-25-NSWIC-Response-to-calls-for-NSW-to-withdraw-from-the-Basin-Plan.pdf>> accessed 6 December 2019.

effectively run their businesses.⁵⁹ Appreciating that anger and irrigator resistance to SDLs (particularly the specific gigalitre limits), WAL conditions and other restrictions, may assist in understanding (but not justifying) motivations for water theft; motivations which are likely to be, in the language of Arlie Hochschild, part of irrigators' "'deep story"; [part of their]... narrative as felt'⁶⁰ and with which good governance may need to deal.⁶¹ We return to Hochschild's thesis later but for the present, we shift focus to the cases of two irrigators, who were prosecuted for water offences (offences that come under the broad category of water theft).

The Barlow and Harris Cases

Water Offences

As observed above, the legislative schemes across the Basin states differ but Pain J has noted ex-curiarily, all, nevertheless, 'broadly provide that it is an offence: to take water'⁶² without authorisation⁶³ and in contravention of licence conditions;⁶⁴ to use water without relevant approvals;⁶⁵ and to construct water- related works without approval.⁶⁶ The different schemes also include offences relating to water metering, such as meter tampering.⁶⁷

The unauthorised take of water, which constitutes an offence, has been dubbed 'water theft'. It is, however, conceded that water theft may be different from traditional property theft. In so being, it reflects the criminal law's capacity to adapt and change, including its capacity to embrace regulatory crime.

Water theft allegations

The issue of MDB water theft or unauthorised water take came to public attention when, in July 2017, the respected current affairs television program, *Four Corners* (in an investigation called *Pumped*), aired allegations of possible water theft.⁶⁸ Some irrigators were thought to

⁵⁹ See Kath Sullivan, "'Can the Plan' Convoy Heads to Canberra Calling for End to Murray Darling Basin Plan' (ABC News, 2 December 2019) <<https://www.abc.net.au/news/2019-12-02/can-the-plan-convoy-converges-on-canberra/11751398>> accessed 26 December 2019.

⁶⁰ Arlie Russell Hochschild, *Strangers in Their Own Land* (The New Press 2016).

⁶¹ Neil Gunningham and Darren Sinclair, *Leaders & Laggards: Next-Generation Environmental Regulation* (Routledge 2017) 9–10; Stephen Bartos, 'Building Better Governance' (*Australian Government, Australian Public Service Commission*) <<https://www.apsc.gov.au/building-better-governance>> accessed 15 December 2019.

⁶² Justice Nicola Pain, 'Administering Water Policy in the Eastern States of Australia — Administrative and Other Challenges' (AIAL National Administrative Law Conference, Canberra, 18-19 July 2019) <<http://www.lec.justice.nsw.gov.au/Documents/Speeches%20and%20Papers/PainJ/Pain%20J%20%20Administering%20Water%20Policy%20in%20the%20Eastern%20States%20of%20Australia%20-%20Administrative%20and%20Other%20Challenges.pdf>> accessed 13 December 2019.

⁶³ *Water Act 1989* (Vic) s 33E; *Water Management Act 2000* (NSW) s 60A; *Water Act 2000* (Qld) s 808; *Natural Resources Management Act 2004* (SA) s 127(1), (6); *Water Resources Act 2007* (ACT) s 77A.

⁶⁴ *Water Act 1989* (Vic) s 64AF; *Water Management Act 2000* (NSW) s 60B; *Water Resources Act 2007* (ACT) ss 28, 77A.

⁶⁵ *Water Act 1989* (Vic) s 64J; *Water Management Act 2000* (NSW) s 91A.

⁶⁶ *Water Act 1989* (Vic) s 64J; *Water Management Act 2000* (NSW) s 91A.

⁶⁷ *Water Act 1989* (Vic) s 64J; *Water Management Act 2000* (NSW) s 91A.

⁶⁸ *Four Corners, Pumped* (ABC, 24 July 2017) <<https://www.abc.net.au/4corners/pumped/8727826>> accessed 15 August 2019.

have taken water to which they were not entitled under their WALs and associated governance instruments. Public reaction to the allegations was swift.⁶⁹ 'Even if people were not greatly concerned about the environment, they did not like a thief.'⁷⁰ Interest in the subject was fuelled by concerns that the MDBA may have known of the allegations approximately a year before *Four Corners* went to air but did not exercise its substantial compliance and enforcement powers, in any serious way.⁷¹

In 2016, the MDBA was purportedly made aware of illegal irrigator activity, by way of its own monitoring investigation.⁷² Sources have reported that the satellite monitoring program, Data Cube, used by the MDBA and designed to scientifically track the effects of environmental flows on the rivers and wetlands, had revealed that water purchased by tax payers, for the environment, was being taken from the river system in one small part of the Barwon River, before it reached the downstream gauge.⁷³ In other words, it was claimed that water was being taken in an unauthorised manner. At least one of properties in the relevant area allegedly found to be using large volumes of water was Rumleigh. Rumleigh, owned by Peter and Jane Harris, was mentioned in the *Four Corners* program⁷⁴ as possibly being part of a water theft scandal.⁷⁵

⁶⁹ Kirstie Fitzpatrick and Alana Calvert, 'Water Theft Allegations Prompt Review of Murray Darling Basin' *Huffington Post*(Online, 30 July 2017) <https://www.huffingtonpost.com.au/2017/07/30/water-theft-allegations-prompt-government-review-of-murray-darling-a-23056383/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlMnVbS8&guce_referrer_sig=AQAAABk86WIXi2BcXfE busSeCnslajD 2AaYID4IgbpJPwOE1KPpcas5xUU6BpxxVfWQBd9NGPSk1YSg-bRvmG4DAgAeQaUtTTW> accessed 15 September 2019.

⁷⁰ Janice Gray, 'Thieves, Shady Deals and Murder'—water theft, buy-backs and fish kills in the Murray Darling Basin' forthcoming chapter in Klaus Bosselman, Laura Westra and Matteo Fermeglia (eds), *Perspective on Ecological Integrity in Science and Law* (Springer 2020).

⁷¹ Michael Slezak, 'Murray-Darling Basin Authority knew of allegations of water theft a year before ABC report' *The Guardian*(Sydney, 27 September 2017) <<https://www.theguardian.com/australia-news/2017/sep/27/murray-darling-basin-authority-knew-of-allegations-of-water-theft-a-year-before-abc-report>> accessed 11 August 2019.

⁷² See Michael Slezak, 'Murray-Darling Basin Authority knew of allegations of water theft a year before ABC report' *The Guardian*(Sydney, 27 September 2017) <<https://www.theguardian.com/australia-news/2017/sep/27/murray-darling-basin-authority-knew-of-allegations-of-water-theft-a-year-before-abc-report>> accessed 11 August 2019.

⁷³ Michael Slezak, 'Murray-Darling Basin Authority knew of allegations of water theft a year before ABC report' *The Guardian* (Sydney, 27 September 2017) <<https://www.theguardian.com/australia-news/2017/sep/27/murray-darling-basin-authority-knew-of-allegations-of-water-theft-a-year-before-abc-report>> accessed 11 August 2019. See also files obtained by the Environmental Defenders Office, NSW on behalf of the ACF under Freedom of Information laws mentioned in Slezak.

⁷⁴ Michael Slezak, 'Murray-Darling Basin Authority knew of allegations of water theft a year before ABC report' *The Guardian* (Sydney, 27 September 2017) <<https://www.theguardian.com/australia-news/2017/sep/27/murray-darling-basin-authority-knew-of-allegations-of-water-theft-a-year-before-abc-report>> accessed 11 August 2019.

⁷⁵ See Michael Slezak, 'Murray-Darling Basin Authority knew of allegations of water theft a year before ABC report' *The Guardian* (Sydney, 27 September 2017) <<https://www.theguardian.com/australia-news/2017/sep/27/murray-darling-basin-authority-knew-of-allegations-of-water-theft-a-year-before-abc-report>> accessed 11 August 2019. Note that the MDBA issued a statement denying it knew of water theft cases and stating that its technology failed to reveal 'robust evidence of any wrongdoing'. See report of MDBA statement in Colin Bettles, 'MDBA rejects assertions it "knew" of water theft allegations but "did nothing"' *Farmonline* (27 September 2017) <<https://www.farmonline.com.au/story/4953211/mdba-rejects-assertions-it-knew-of-water-theft-allegations-but-did-nothing/>> accessed 6 December 2019. Farmonline also notes the

In light of the allegations about the MDBA's knowledge of possible water theft, it was perhaps unfortunate that the MDBA was asked, by the then Prime Minister, to review NSW's compliance with the MDBP.⁷⁶

Meanwhile, at the state level, the NSW government responded to the *Four Corners*' allegations by commissioning a different report, the Matthews' Report. Matthews, the respected, former head of the National Water Commission found NSW's water compliance and enforcement were 'ineffectual and require[d] significant and urgent improvement.'⁷⁷ He also found that metering, monitoring and measurements of water extraction in the Barwon-Darling system were below standard.⁷⁸ Accordingly, water could be readily stolen because there were inadequate records being kept on abstractions. He, therefore, recommended a 'no metering, no pumping' rule⁷⁹ and suggested a 'systemic fix'⁸⁰ that included setting up a Natural Resources Access Regulator separate from the relevant government department.⁸¹ He also recommended, 'enabling the public to readily access from a single source all details of individuals' water entitlements, licence conditions, meter readings, water account balances and trading activities.'⁸² Many, but not all, of these recommendations were implemented.⁸³

MDBA provided a report on the Data Cube project to WaterNSW in April 2017 and left it up to WaterNSW to take the matter further if it so chose.

⁷⁶ Michael Slezak, 'Murray-Darling Basin Authority knew of allegations of water theft a year before ABC report' *The Guardian* (Sydney, 27 September 2017) <<https://www.theguardian.com/australia-news/2017/sep/27/murray-darling-basin-authority-knew-of-allegations-of-water-theft-a-year-before-abc-report>> accessed 11 August 2019.

⁷⁷ NSW Department of Industry, *Independent NSW Investigation Into Water Management and Compliance* (8 September 2017) 4 <https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/120193/Matthews-interim-report-nsw-water.pdf> accessed 12 August 2019 (Matthews Report).

⁷⁸ NSW Department of Industry, *Independent NSW Investigation Into Water Management and Compliance* (8 September 2017) 4 <https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/120193/Matthews-interim-report-nsw-water.pdf> accessed 12 August 2019 (Matthews Report).

⁷⁹ NSW Department of Industry, *Independent NSW Investigation Into Water Management and Compliance* (8 September 2017) 4 <https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/120193/Matthews-interim-report-nsw-water.pdf> accessed 12 August 2019 (Matthews Report).

⁸⁰ NSW Department of Industry, *Independent NSW Investigation Into Water Management and Compliance* 8 September 2017, 4 <https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/120193/Matthews-interim-report-nsw-water.pdf> accessed 12 August 2019 (Matthews Report).

⁸¹ NSW Department of Industry, *Independent NSW Investigation Into Water Management and Compliance* 8 September 2017, 4 <https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/120193/Matthews-interim-report-nsw-water.pdf> accessed 12 August 2019 (Matthews Report).

⁸² NSW Department of Industry, *Independent NSW Investigation Into Water Management and Compliance* 8 September 2017, 4 <https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/120193/Matthews-interim-report-nsw-water.pdf> accessed 12 August 2019 (Matthews Report).

⁸³ NSW Department of Industry, *Independent NSW Investigation Into Water Management and Compliance* 8 September 2017, 4 <https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/120193/Matthews-interim-report-nsw-water.pdf> accessed 12 August 2019 (Matthews Report).

Matthews observed that alleged cases of water theft had remained unresolved for far too long⁸⁴ and concluded that 'the [water] industry's "social licence to irrigate" [was] at stake',⁸⁵ so 'acknowledging a social and ethical dimension (not just a legal one) to the issue of water sharing and allocation'.⁸⁶ The NSW parliament responded to the Four Corners program and Matthews' criticisms and recommendations by passing a water law reform bill in June, 2018 that, among other things, increased the maximum penalty for water theft to five million dollars for a company and \$500,000 for an individual.⁸⁷

Harris case

One of those slow-to-be resolved cases, referred to above, was that of Peter and Jane Harris, whose activities had been mentioned in the Four Corners program. The Harrises were irrigators who held a WAL but, who, in 2014-2015, allegedly pumped, five times more so called A Class water (the most valued class of water that can be pumped during periods of low river flows) than their WAL permitted. Then, in 2015-2016, those same irrigators, who were permitted to abstract B class medium flow water on 30 June only, allegedly abstracted 3,147 billion litres before that date, according to NSW data obtained by the NSW Environmental Defenders' Office (NSW) (EDO) under Freedom of Information laws.⁸⁸ The WMA s 60 makes contravening the terms and conditions of a WAL, an offence.

It also came to light in civil proceedings brought by the EDO, when seeking the release of Peter Harris's water usage data, that the head of WaterNSW (the state regulator at the time) wrote to Harris stating that he was 'sympathetic with submissions' by Harris to protect his water usage data and that the regulator was 'actively exploring' ways, including via amendments to the Government Information Public Access Act, to protect water users' data.⁸⁹

In the criminal case *WaterNSW v Harris*, the Harrises pleaded not guilty to two charges of breaching a condition of a water supply works and a water use approval. Such breaches are an offence under WMA s 91(G)(2). At the time of writing judgement has been reserved before Robson J. In May 2019 new non-metering charges were also laid in relation to a

⁸⁴ NSW Department of Industry, *Independent NSW Investigation Into Water Management and Compliance* 8 September 2017, 4 <https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/120193/Matthews-interim-report-nsw-water.pdf> accessed 12 August 2019 (Matthews Report).

⁸⁵ NSW Department of Industry, *Independent NSW Investigation Into Water Management and Compliance* 8 September 2017, 5 <https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/120193/Matthews-interim-report-nsw-water.pdf> accessed 12 August 2019 (Matthews Report).

⁸⁶ Janice Gray, 'Thieves, Shady Deals and Murder'—water theft, buy-backs and fish kills in the Murray Darling Basin' forthcoming chapter in Klaus Bosselmann, Laura Westra and Matteo Fermeglia (eds), *Perspective on Ecological Integrity in Science and Law* (Springer 2020).

⁸⁷ *Water Management Amendment Act 2018 No 31* (NSW).

⁸⁸ Peter Hannam, 'More claims of excess water use by NSW irrigators leak out' *SMH* (Sydney, 7 August 2018) citing NSW EDO <<https://www.smh.com.au/environment/more-claims-of-excess-water-extraction-by-nsw-irrigators-surface-20170805-gxq2jh.html>> accessed 14 August 2019.

⁸⁹ Letter quoted by Anne Davies in 'WaterNSW boss told cotton grower of bid to keep his usage data being released' *The Guardian* (Sydney, 28 March 2018) <<https://www.theguardian.com/australia-news/2018/mar/28/waternsw-boss-told-cotton-grower-of-bid-to-keep-his-usage-data-from-being-released>> accessed 9 August 2019

different property. These charges relate to two counts of taking water when the metering equipment was broken.⁹⁰

As there is no judgement as yet in the *Harrises'* case, it is impossible to analyse reasons for the court's decision but what is significant about this case and Barlow's case too, is the lack of will, on the part of the regulator, to prosecute. If criminal sanctions are to have an impact, they will be dependent on enforcement of the law (in this case legislative provisions). They will also need to rely on reliable, diligent and effective monitoring which includes metering, so that there is robust evidence to support prosecutions.

Yet, very often the standard of metering itself is a somewhat neglected issue, receiving little attention. More commonly discussion focuses on whether there is metering at all, but the integrity of pumps and meters is critical, too. Anecdotally it is also said that even where tele-metering exists it may already be inadequate and outmoded because it runs on 2G rather than 4G or 5G.⁹¹ Such issues raise related concerns about the cost of funding effective monitoring (and who should fund it) and they highlight the bigger question: if enforcement through criminal sanctions is dependent on compliance, which is in turn dependent on obsolete, or outmoded monitoring technologies, how effective are the sanctions likely to be?

Barlow's case

Barlow's case is the other water theft case that was prosecuted following the *Four Corners'* program. Anthony Barlow, was the occupier and manager of a property that bordered the Barwon River, in the MDB. His parents held the property under a perpetual lease. They also held a WAL,⁹² a water supply works⁹³ and a water use approval. Clearly, all abstractions needed to be compliant with these and any additional instruments in force at the time.

However, it was alleged that Barlow instructed an employee to operate the relevant pump (a MACE Agri-Flo Series 3 Meter) on two occasions in 2015; one between 16-18 May, 2015 and another on 29 May- 2 June, 2015. On both sets of dates an embargo on water abstractions was in place. The embargo was imposed by Temporary Water Restrictions Order Upper Darling Basin, 2014 (No 2) made under s 324 of the *WMA*. The conduct constituted a breach of s 336C(1) *WMA*, the maximum penalty for which was \$247,500 for

⁹⁰ The breaches are alleged to have occurred on 6 and 8 August, 2015 at a property called, Mercadool, near Walgett. The charges relate to (a) pumps measuring engine running time and (b) flow.

⁹¹ Some non-urban water meters do not need to be compliant with standards until July 2020. See Department of Agriculture, *National Framework for Non-urban Water Metering* (Australian Government, Policy Paper, 2009) <<https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/water/national-framework-non-urban-water-metering.pdf>> accessed 27 December 2019. Also see supplementary notes <<https://www.agriculture.gov.au/water/policy/nwi/nonurban-water-metering-framework>> accessed 27 December 2019.

⁹² The WAL (no 3368) was an Unregulated River B Class Access Licence that authorised water take from the Barwon River, a watercourse within the Barwon-Darling Unregulated River Source. The water source is defined in the Barwon-Darling Unregulated and Alluvial Water Sources 2012. Note an unregulated river is one that does not have major storage facilities such as dams, weirs or connecting rivers that do not release water downstream.

⁹³ A works approvals covers equipment such as pumps that draw water from the river into irrigation channels. Water that is not needed at the time of abstraction is often stored in dams.

an individual. Additionally, it was alleged that the water take was not measured properly because the meter was broken; conduct which constituted a breach of s91(2) of the WMA.⁹⁴ Initially, Barlow pleaded not guilty but ultimately changed his plea to that of guilty.

He was sentenced in 2019⁹⁵ for taking water when an embargo had been imposed⁹⁶ and for taking water by way of two pumps both of which had broken meters. The penalty handed down was \$189,491.00 plus the prosecutor's costs.

Preston CJ was required to take into account the objective seriousness of the offence and the subjective circumstances of the offender, both standard sentencing requirements. In relation to environmental offences, the former may be illuminated by the nature of the statutory provision of which there has been contravention as well as that provision's place in the legislation as a whole.⁹⁷ Consideration of the statute's objects assists in this task.

The WMA's objects embed the concept of ecologically sustainable development in that statute,⁹⁸ a concept which, in turn, may include the principles of inter-generational equity, the precautionary principle, improved valuation pricing and incentive mechanisms, and the conservation of biological integrity and ecological integrity.⁹⁹ One of the key ways the WMA seeks to fulfil these principles is by regulating (a) water abstractions and (b) water use (outlined above in the sections on reducing consumption). Barlow's conduct infringed such regulation and the principles outlined above, constituting an offence.

However, Preston CJ found Barlow's crime (like most crimes) did not warrant the maximum penalty (reserved for the worst examples of the offence) for a number of reasons, including that Barlow received no financial gain as the volume of water he took was still within his water allocation. His Honour also found the embargo-breaching offence was not at the high end of harmful because downstream holders' rights were not affected and no environmental harm was caused or likely to be caused, by the offending abstraction, even though the abstraction occurred during a period of water shortage, in the town of Broken Hill. Further, His Honour applied a discount for the remorse Barlow demonstrated by way of offering reparation (the return of the water or the water being taken off his account).

While Preston CJ meticulously applied the relevant legislation (including the WMA, the *Crimes (Sentencing Procedure) Act 1999* (NSW) and the *Criminal Procedure Act 1986* (NSW)) the sentence highlights the advantage of socio-economic status, in that Barlow was in the position to be able to offer to repay the 'stolen' water and is, consequently rewarded in

⁹⁴ *WaterNSW v Barlow* [2019] NSWLEC 30

⁹⁵ *WaterNSW v Barlow* [2019] NSWLEC 30; see also Dominic Smith, '(19-015) Water NSW v Barlow [2019] NSWLEC 30'. (2019) 38 Environmental Law Reporter 4 <<https://search.informit-com-au.wwwproxy1.library.unsw.edu.au/documentSummary;dn=637719146128481;res=IELHSS>> accessed 23 October 2019.

⁹⁶ There was some evidence that the Water Minister had mistakenly advised irrigators informally at a local meeting that the embargo had been lifted. Embargoes are, however, only lifted by formal notification.

⁹⁷ *WaterNSW v Barlow* [2019] NSWLEC 30, [17].

⁹⁸ WMA 2000 (NSW) s 3; Ecologically sustainable development is also embedded in the WMA through its provisions under Pt 1, Ch 7 permitting the Minister to impose embargoes.

⁹⁹ These principles of ecologically sustainable development are described in *Protection of the Environment Administration Act 1991* (NSW).

sentencing for his remorse, remorse demonstrated through his willingness to make amends. Clearly, the idea of reparation, recompense and restitution is, generally speaking, a good one. It helps mitigate the victim's loss and/or harm. However, more impoverished offenders than Barlow may not be in the position to repay what they have stolen. Those who are unemployed, homeless and hungry for example, or farmers in severe debt, are unlikely to be in the position to repay what is stolen and consequently, will not receive similar sentencing reductions.

Barlow's case also serves to highlight how, without effective monitoring (especially through appropriate metering), unauthorised abstractions may potentially go un-noticed for long periods. Indeed, weak monitoring, compliance and enforcement may actually even indirectly incentivise water crimes. If offenders do not fear being apprehended, they may be more likely to commit the crime; a proposition arguably supported by the criminological literature that concludes that the likelihood of being caught is the primary deterrent and that the severity of the sentence has no deterrent effect.¹⁰⁰ Hence, effective monitoring may serve to increase the likelihood of being caught and thus may deter commission of the offence.

More specifically, unauthorised water abstractions (that come under the term 'theft') undermine key tenets of the *WMA*. That Act relies on WALs operating in conjunction with water sharing plans and water markets to support ecologically sustainable development. If the established mode of regulation, including the licensing system and the related system of water trading are circumvented by people who steal (and take more or different water than that to which they are entitled), it is likely not only to lead to market distortions but also allegations of unfairness from other water rights' holders who 'play fair'. Systems of water allocation such as those in NSW, where there is reliance on licences, water plans, trading and SDLs are dependent on everyone playing by 'the rules of the game'.¹⁰¹

Further, if would-be offenders think that their unauthorised take is likely to go unnoticed, copy-cat conduct may result, potentially contributing to additional free-riders. Additionally, where unauthorised abstractions exceed the taker's actual entitlement, there will be less water available for others (including the environment), making water theft both serious and reprehensible.¹⁰² Such unauthorised (non-compliant) behaviour is also likely to compromise the realisation of ecological integrity, in part because ecological integrity depends on holistic environmental management that takes into account a range of planetary interconnections and relationships (such as those between water, water users, land and food, for example).¹⁰³ When those interconnections and relationships are ignored or down-played in

¹⁰⁰ David Brown and others, *Criminal Laws* (6th edn, Federation Press 2015) 1336.

¹⁰¹ Juan C Castilla-Rho and others, 'Sustainable groundwater management: How long and what will it take?' (2019) 58 *Global Environmental Change* 101972 <<https://doi.org/10.1016/j.gloenvcha.2019.101972>> accessed 23 December 2019, refer to 'the rules of the game' in a different context, that of groundwater in developing nations, observing in that context monitoring may not be the best approach.

¹⁰² This may be otherwise if water were bountiful but in the MDB, in 2019-2020, it is not.

¹⁰³ On ecological integrity see Robert M Hughes, 'Ecological Integrity: Conceptual Foundations and Applications' in Oxford Bibliographies, (Oxford University Press, 2019<<https://www.oxfordbibliographies.com/>> accessed 20 December 2019; Klaus Bosselmann, 'Earth Democracy, Sustainability and Ecological Integrity' in Ron Engels, Laura Westra and Klaus Bosselmann (eds), *Democracy, Ecological Integrity and International Law*

favour of privileging individual gain (such as the thief's individual advantage) it will be harder to maintain or restore ecological integrity. One way in which those interconnections are often dealt with (and ecological integrity supported) is by reference to an over-arching philosophical frame, such as the common good, where competing interests may be mediated. It is beyond the scope of this article to examine the concept of the common good but suffice it to say, that the common good and related concepts such as the public interest and the common heritage of humankind resonate with many justifications for criminalisation.

A lack of economic, political or other will – practical examples

At this point, however, it should be noted that despite the NSW trend towards criminalisation, water theft prosecutions such as those in the Harris and Barlow cases have been fairly rare. A long history of unmetered pumping left open opportunities for unauthorised pumping¹⁰⁴ and historically resulted in few prosecutions. There was little will to enforce compliance, a position partly explained by the difficulty of gathering evidence for such prosecutions. Indeed, until recently, monitoring and compliance in relation to (unauthorised) pumping, were held in so little regard that there were: insufficient numbers of inspectors driving the vast network of NSW roads to check on water abstractions, diversions and use; inadequate inspector training; a significant number of unlicensed bores and as noted above, unsatisfactory metering equipment.¹⁰⁵

In terms of inspectors, the Strategic Investigation Unit (SIU) within the Department of Primary Industry and Water (DPIW) was downsized from its original staff of 12 officers to six in the months just before that department was split in 2016, to create WaterNSW (handling service delivery to water users and compliance actions) and DPI Water (handling water policy development). This staff cut rendered the SIU 'ineffectual'.¹⁰⁶ The situation was exacerbated when only four officers were later transferred to WaterNSW. 'Compliance enforcement plummeted over this period, falling from 620 actions a year to just 200 in 2016-17.'¹⁰⁷ One farmer, who has run cotton farms in the Bourke region for 25 years, conceded that over the past decade inspectors visiting farmers had 'become very rare' and the issue of transparency and compliance was a serious one.¹⁰⁸ Another former grazier claimed to have alerted authorities for years about unapproved works diverting water

(Cambridge Scholars 2010) 91; Laura Westra, Klaus Bosselmann, Janice Gray and Katy Gwiazdon (eds), *Ecological Integrity, Law and Governance* (Routledge 2018).

¹⁰⁴ Cameron Holley and Darren Sinclair, 'Compliance and Enforcement of Water Licences in NSW: Limitations in Law, Policy and Institutions' (2012) 15(2) *Australasian Journal of Natural Resources Law and Policy* 149.

¹⁰⁵ Cameron Holley and Darren Sinclair, 'Compliance and Enforcement of Water Licences in NSW: Limitations in Law, Policy and Institutions' (2012) 15(2) *Australasian Journal of Natural Resources Law and Policy* 149.

¹⁰⁶ Alex Druce and Mike Foley, 'NSW Water Spray from Ombudsman, Creates Headache for Niall Blair' (*FarmOnline*, 15 November 2017) <<https://www.farmonline.com.au/story/5059730/state-watchdogs-unexpected-spray-nsw-in-disarray/>> accessed 22 August 2019.

¹⁰⁷ Alex Druce and Mike Foley, 'NSW Water Spray from Ombudsman, Creates Headache for Niall Blair' (*FarmOnline*, 15- November 2017) <<https://www.farmonline.com.au/story/5059730/state-watchdogs-unexpected-spray-nsw-in-disarray/>> accessed 22 August 2019.

¹⁰⁸ Tony Thompson cited in Peter Hannam, 'Under the Pump: Cotton Industry Rejects Blame for Ailing Darling' (*SMH*, 18 January 2019) <<https://www.smh.com.au/environment/conservation/under-the-pump-cotton-industry-rejects-blame-for-ailing-darling-river-20190118-p50s7b.html>> accessed 24 December 2019.

without a licence, for use on farmland.¹⁰⁹ These cases represent examples of where regulators decided not to intervene and accordingly serve to highlight Gunningham's point that 'where' and 'how' to intervene in the regulatory field, are key challenges.¹¹⁰

That regulators such as WaterNSW were simply not competent may be seen in many ways. For example, the NSW Ombudsman's 2018 'correction' report reinforces the narrative of regulatory neglect and sloppiness. It reveals how WaterNSW inadvertently gave the Ombudsman grossly inflated figures on the number of enforcement actions that had been taken.¹¹¹ The consequent, necessary amendments to the Ombudsman's Report did little to build confidence in the regulator. That the regulator was also actively investigating ways to block water users' data from reaching the public domain, is also problematic (referred to above). It reveals a lack of transparency in water management – the opposite of what the Matthews Report went on to recommend and the opposite of what the MDB Commissioner (a former Federal Police Commissioner) has advocated, in relation to undeclared (non-transparent) conflicts of interest among politicians, lobby groups, and businesses operating in the water market. (See below.) Indeed, the Commissioner has commented 'you could draw the conclusion that if conflicts of interest [in relation to water licences and water buy-backs, for example] aren't transparent it could lead to corruption....Water is now the value of gold'.¹¹² In this context, he argues for the proceeds of crime legislation to apply to water offences, meaning that water offenders may potentially lose farming property, for example.¹¹³

The conduct of WaterNSW (the regulator) also arguably provides an example of regulatory capture, a phenomenon which not only militates against the effective and unbiased operation of water governance but one which goes to the very heart of confidence in the regulatory system and its ability to effectively collect and assemble the necessary data to support prosecutions.¹¹⁴ When NSW's former chief investigator responsible for water law enforcement stated, '[i]t was clear to me that not just one property was involved [in

¹⁰⁹ Peter Hannam, 'Under the Pump: Cotton Industry Rejects Blame for Ailing Darling' (*SMH*, 18 January 2019) <<https://www.smh.com.au/environment/conservation/under-the-pump-cotton-industry-rejects-blame-for-ailing-darling-river-20190118-p50s7b.html>> accessed 24 December 2019. See also Cameron Holley and Darren Sinclair, 'Compliance and Enforcement of Water Licences in NSW: Limitations in Law, Policy and Institutions' (2012) 15(2) *Australasian Journal of Natural Resources Law and Policy* 149, 168, fn 121.

¹¹⁰ Neil Gunningham, 'Enforcing Environmental Regulation' (2011) 23(2) *Journal of Environmental Law* 169.

¹¹¹ Ombudsman NSW, *Correcting the Record: Investigation into Water Compliance and Enforcement 2007-2017* (Special Report to Parliament, 8 March 2018) <https://www.ombo.nsw.gov.au/_data/assets/pdf_file/0003/53229/Correcting-the-record_Investigation-into-water-compliance-and-enforcement-2007-17.pdf> accessed 22 August 2019.

¹¹² Mick Keelty quoted in Karen Middleton, 'Keelty warns river "ripe for corruption"' (*The Saturday Paper*, 27 April 2019) <<https://www.thesaturdaypaper.com.au/news/politics/2019/04/27/keelty-warns-river-ripe-corruption/15562872008055>> accessed 22 December 2019.

¹¹³ Mick Keelty quoted in Karen Middleton, 'Keelty warns river "ripe for corruption"' (*The Saturday Paper*, 27 April 2019) <<https://www.thesaturdaypaper.com.au/news/politics/2019/04/27/keelty-warns-river-ripe-corruption/15562872008055>> accessed 22 December 2019.

¹¹⁴ See Ombudsman's words, "Compliance and enforcement functions has been compromised by a deep cultural clash between a strong focus on customer service to water users on the one hand and the compliance and enforcement activities necessary to maintain the viability and integrity of the water market on the other" quoted in Alex Druce and Mike Foley, 'NSW Water Spray from Ombudsman, Creates Headache for Niall Blair' (*FarmOnline*, 15 November 2017) <<https://www.farmonline.com.au/story/5059730/state-watchdogs-unexpected-spray-nsw-in-disarray/>> accessed 22 August 2019.

unauthorised use], that there was basically an entire river system that was seriously lacking accountability, and compliance with the water legislation of [NSW]¹¹⁵ it suggests that something was or is seriously wrong with the regulator's performance, undermining the effect of criminal justice sanctions.

Although NSW has now passed a raft of water law amendments including those that increase penalties, penalty levels can be largely symbolic without proper/rigorous enforcement of relevant water statutes criminalising water theft. At the risk of repetition, penalties simply don't come into play if offenders are not prosecuted because there is insufficient or inadequate investigation and evidence to support prosecution.

If regulators (and government departments) have little or no appetite for prosecuting, as the *Four Corners* program and the Matthews Report revealed was the case, water crimes, although 'on the books', remain merely symbolic. Whether it be a lack of will or a lack of finance that deters regulators from prosecuting, the result is the same. Legislation enshrining water crimes becomes a tool that helps establish the political legitimacy of governments, but it does little else. In such circumstances, criminalisation may be used to demonstrate that a government is doing something – taking an issue seriously – when in fact, it is not. Consequently, criminalisation becomes a strategy that enables government to make a pretence of earnestness, sincerity and pro-active conduct — suggesting that it is being 'tough' on water crime – when, in reality, there is little real conviction and commitment to reforming behaviours that play out unjustly on other members of the community and on the environment. Nevertheless, law and order politics, as an imaginary at least, remains popular at the ballot box.¹¹⁶

A change on the horizon? – more prosecutions

There are, nevertheless, some suggestions that monitoring, compliance and enforcement are being taken more seriously than in the past. Justice Pain has noted ex-curiially some increases in water offence prosecutions. She observes that the NSW Land and Environment Court statistics, reveal that a number of proceedings were commenced in the period from July 2016 to July 2017. In particular, she notes 'five class 5 (summary criminal enforcement) proceedings.' Further, '[b]etween July 2017 and February, 2019...WaterNSW and the NRAR commenced 30 class 5 proceedings [demonstrating] a substantial increase. More broadly, 69 class 5 summonses were filed between June, 2009 and 2017 whilst 27 summonses were filed between 2018 and June 2019 (constituting 28 percent of all cases filed over the 10 year period'.¹¹⁷ Additionally, in 2018 the NRAR received 70 percent more cases for investigation

¹¹⁵ *Four Corners, Pumped* (ABC, 24 July 2017) <<https://www.abc.net.au/4corners/pumped/8727826>> accessed 15 August 2019.

¹¹⁶ Examples may be seen in the Conservatives campaign in the 2019 (Brexit) General Election in the United Kingdom, where the theme of being tough on crime was evident. See Conservatives, *Our Plan: Conservative Manifesto 2019*, point 2 <<https://vote.conservatives.com/our-plan>> accessed 11 December 2019. See generally, John Pratt, *Penal Populism*, (Routledge 2006); Russell Hogg and David Brown, *Rethinking Law and Order* (Pluto Press 1988).

¹¹⁷ Justice Nicola Pain, 'Administering Water Policy in the Eastern States of Australia — Administrative and Other Challenges' (AIAL National Administrative Law Conference, Canberra, 18-19 July 2019) <<http://www.lec.justice.nsw.gov.au/Documents/Speeches%20and%20Papers/PainJ/Pain%20J%20%20Adminis>

and finalised 80 per cent more cases while ‘five times as many allegations of unlawful water take’ were received.¹¹⁸

However, despite these figures, in 2019 there are still some aspects of water management (including monitoring) that remain problematic and may or do impact on the issue of prosecutions being brought. The telemetering issue has been referred to above, while the weak measurement of flood plain harvesting (discussed in the Walker Report) which in Walker’s words, leaves floodplains ‘a virtually data-free zone’ in parts of the northern MDB (in Queensland and NSW) is another.¹¹⁹ According to the Australia Institute, the Northern Basin Commissioner’s First Annual Report reveals that many important issues remain to be explored. The Institute contends that Commissioner Keelty has not investigated the flood plain monitoring issue adequately.¹²⁰ It also observes that ‘other claims of wrong-doing, which should have been investigated [but were not] by the [now] Inspector General for the Murray Darling Basin [Keelty], in the last year include: [a]lleged rorting of the Commonwealth’s \$4 billion water efficiency program; [a]llegations that the Murray-Darling Basin Authority drained Menindee Lakes outside its operating rules; [g]rowth in floodplain harvesting and the process to issue floodplain harvesting licences; [and]... [q]uestionable water purchases and their links to politicians’.¹²¹ Clearly, several of these issues potentially constitute criminal conduct. Other recent reports have also raised problems with MDB water management and compliance¹²² some of which also arguably have implications for issues of criminality.

[tering%20Water%20Policy%20in%20the%20Eastern%20States%20of%20Australia%20-%20Administrative%20and%20Other%20Challenges.pdf](https://www.legislation.gov.au/editions/details?edid=201900001&edition=201900001)> accessed 13 December 2019;
Murray-Darling Basin Authority, ‘Discover Surface Water’ (Australian Government)
<<https://www.mdba.gov.au/discover-basin/water/discover-surface-water>> accessed 24 October 2019.
Internal citations not included.

¹¹⁸ Justice Nicola Pain, ‘Administering Water Policy in the Eastern States of Australia — Administrative and Other Challenges’ (AIAL National Administrative Law Conference, Canberra, 18-19 July 2019)
<<http://www.legislation.gov.au/editions/details?edid=201900001&edition=201900001>> accessed 13 December 2019.
Internal citations not included.

¹¹⁹ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 34
<<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019. (Walker Report).

¹²⁰ Mick Keelty, *Northern Basin Commissioner First Year Report 2019* (Australian Report, 2019)
<<https://www.igmbd.gov.au/media/11>> accessed 18 December 2019. Note Mick Keelty was appointed Interim Inspector-General, Murray Darling Basin Water Resources in October 2019. Prior to this he was the Northern Basin Commissioner and wrote the above report in that capacity.

¹²¹ Rod Campbell, ‘Murray Darling ‘top cop’ blind to Basin’s problems’ (*Australia Institute*, 17 December 2019)
<<https://www.tai.org.au/conc>> accessed 18 December 2019. See also *Maryanne Slattery, Agatha Court and Rod Campbell, The Basin Files: The maladministration of the Murray-Darling Basin Plan: Volume 2* (Australia Institute, December 2019)
<<https://www.tai.org.au/sites/default/files/P840%20The%20Basin%20Files%20Vol%202%20%5BWeb%5D.pdf>> accessed 18 December 2019.

¹²² See Australian Government, Productivity Commission, *Murray-Darling Basin Plan: Five-year assessment* (Inquiry Report No 90, 19 December 2018) <<https://www.pc.gov.au/inquiries/completed/basin-plan/report/basin-plan.pdf>>
accessed 18 December 2019; NSW Natural Resources Commission, *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012* (Final Report, 2019).

To reiterate, without proper monitoring and investigation to provide the necessary evidence of legal and regulatory breaches, prosecutorial (enforcement) action is seriously hampered. In such circumstances, any potential deterrent effect from an increase in the likelihood of being detected or from increased penalties, is reduced.

Why criminalise?

Yet, even if the monitoring of unauthorised water abstractions improves, offenders are caught and prosecution rates rise, as Pain's figures indicate may now be the case, we are left to ask whether criminalisation is the best tool to support effective water management? This raises the more general questions of why criminalise and what does criminalisation achieve? Or as Stanley Cohen put it:

'Criminalization is a particular reaction to a defined social problem. The empirical question is, under what conditions do certain people consider that a given conflict requires state intervention, and if it does, should this intervention take the form of criminal justice (rather than another system, for example civil law)? The political question is why and how this preference becomes a reality. The pragmatic question is, what do we gain by defining the problem in terms of crime?' ¹²³

The answers to these questions are complex and are central issues in criminology and penology, where the dangers of 'overreach'¹²⁴ or 'overcriminalisation'¹²⁵ have been highlighted since the 1960s. More recently, the emergence of green criminology has highlighted a range of ecologically and environmentally damaging and socially harmful activities that some scholars have argued should be criminalised.¹²⁶ It would, therefore, be impossible to do these questions justice here but the following offers some brief responses.

Collective moral project

One key reason for criminalising certain behaviours is well set out by legal philosopher, Anthony Duff. Duff argues that criminalisation represents society collectively taking a stand against certain behaviours (and the outcomes that are likely to arise from those behaviours or acts).¹²⁷ In criminalising, society is setting a moral position, affirming that something is 'wrong'. Hence, criminalisation is a collective moral project. Applying this understanding to the water context, disdain for, and disapproval of unauthorised water take, might form the basis of a collective moral project positioning such conduct outside what society considers acceptable. In other words, stealing of an important, life-giving and highly valued resource, such as water might collectively be regarded as reprehensible and not to be condoned.

¹²³ Stanley Cohen, *Against Criminology* (Transaction Publishers 2008) 267.

¹²⁴ Norville Morris and Gordon J Hawkins, *The Honest Politicians Guide to Crime Control* (Chicago University Press, 1970).

¹²⁵ Douglas Husak, *Overcriminalization: The Limits of the Criminal Law* (Oxford University Press 2008).

¹²⁶ See Rob White (ed) *Global Environmental Harm: Criminological Perspectives* (Willan Publishing 2010); Avi Brisman and Nigel South, *Green Cultural Criminology: Constructions of Environmental Harm, Consumerism, and Resistance to Ecocide* (Routledge 2014); Rob White and Diane Heckenberg, *Green Criminology: An Introduction to the Study of Environmental Harms* (Routledge 2014); Nigel South and Avi Brisman (eds), *Routledge International Handbook of Green Criminology* (Routledge 2013).

¹²⁷ See Antony Duff, *Answering for Crime: Responsibility and Liability in the Criminal Law* (Hart Publishing, 2007); and more recently, Antony Duff, *The Realm of Criminal Law* (Oxford University Press 2018) 6.

However, because criminal law is not static, and is historically and culturally relative, collective moral projects may alter over time, place and circumstance. Hence, if water resources were to become plentiful, water theft may perhaps be decriminalised. Accordingly, circumstances such as drought and climate change, which impact on the volume of water available to be shared, and in turn, impact on the severity of the effects of water theft, ultimately may have a role to play in decisions about whether unauthorised water take should be criminalised. In other words, circumstances may exacerbate or ameliorate the degree of opprobrium engendered by conduct such as unauthorised water take, allowing unauthorised take to move in and out of criminalisation. Crime is, therefore, a fluid concept. Certain behaviours move between what is criminal and what is not, as, for example, is the case with certain public order offences including offensive behaviour,¹²⁸ drug use,¹²⁹ abortion¹³⁰ and domestic violence, the last of which has moved from being regarded by police as primarily a personal and domestic problem to being characterised as a crime.¹³¹ Hence, in very water-rich jurisdictions such as Iceland or parts of Scandinavia, there may be little need to govern water take particularly stringently. Authorisation may not be necessary and criminalisation may be seen as less appropriate.

This ability to criminalise and decriminalise is largely possible because crime is socially and culturally based.¹³² Behaviours are not universally understood as crimes. (Hence, foreign visitors may sometimes offer as a defence, words such as, 'this is not a crime in my country.')¹³³ Yet, there may be pressure to criminalise because from a political point of view criminalisation is relatively easily adjusted and modified compared with other modes of governance, such as 'family, formal education, religion, the media, trade unions, professional, cultural and sporting associations, peer groups, social mores and increasingly the market, where people are consumers'.¹³⁴ Formal alteration of laws that introduce or remove criminality is at 'the behest of parliament',¹³⁵ and can be, and frequently is, conducted rapidly with minimal research or debate, in response to individual cases, scandals and media campaigns.

Deterrent Value

Another reason commonly proffered for criminalising certain conduct, is to deter future offenders (known as general deterrence) and the individual offender (known as specific deterrence). Deterrence is largely taken for granted, an article of faith, with little research evidence to support it. It is a simplistic notion based on the assumption, in relation to specific deterrence, that if offenders are caught and punished for breaching the code of behaviour on which society has collectively agreed, then those offenders will be unlikely to

¹²⁸ For example, swearing was once offensive behaviour whereas today, in many circumstances, it will not be so regarded.

¹²⁹ Troy Duster, *The Legislation of Morality: Law, Drugs, and Moral Judgment* (Free Press 1970).

¹³⁰ For example, in 2019, in both Northern Ireland and NSW, abortion was decriminalised.

¹³¹ This is the case in Australia, for example. See David Brown and others, *Criminal Laws* (6th edn, Federation Press 2015) ch 7.6.

¹³² Nicola Lacey, 'Legal constructions of crime' in Mike Maguire, Rodney Morgan and Robert Reiner (eds), *the Oxford Handbook of Criminology* (3rd edn, Oxford University Press 2002) 282.

¹³³ Indeed, even conduct such as rape in marriage or honour killings are acts that are considered 'wrong' in some jurisdictions but are condoned in others.

¹³⁴ David Brown and others, *Criminal Laws* (6th edn, Federation Press 2015) 31.

¹³⁵ David Brown and others, *Criminal Laws* (6th edn, Federation Press 2015) 31.

commit the offence again. They will learn their lesson and recidivism will be unlikely. As Brown and others put it:

‘...general deterrence depends on offenders knowing the law and knowing the likely penalties, engaging in rational calculations unaffected by anger, rage, passion, drug and alcohol abuse, and psychological disturbances of various kinds, and having a belief that they will be apprehended, prosecuted and convicted, to say nothing of a wide range of economic, social and cultural factors that provide the context within which various forms of offending occur.’¹³⁶

Moreover, recidivism rates in relation to the most severe sentence, imprisonment, invariably range in many jurisdictions around 50% (reoffending within a year of release, in the UK 48% for adults, 65% for children and 63% for those serving sentences of less than 12 months)¹³⁷ and around two thirds of prisoners having served a previous term of imprisonment. So that, as noted above, the deterrent value of criminalisation is highly contestable, with the likelihood/fear of being caught, rather than the severity of the sentence itself, being the primary deterrent¹³⁸ As for the severity of the sentence, the spike in knife crimes in London in the face of the hefty sentences available for offences such as murder, manslaughter and grievous bodily harm, serves to demonstrate how tough sentences do not necessarily deter offenders, particularly those committing expressive crimes.

Returning to the water context, it might be argued that water theft is an example of a ‘rational’ offence¹³⁹ where, unlike expressive offences such as assault and homicide, the sentence level may possibly act as a deterrent if the offending behaviour follows a plan of rational calculation that factors in the unlikelihood of being caught and the purely monetary nature of any penalty. However, this calculus does not seem to work in relation to Barlow’s embargo offence. Barlow attended a local meeting, where the then water Minister announced that the embargo on water abstractions had been lifted. This was incorrect because an embargo could only be lifted by way of gazettal. Relying on the Minister’s announcement, Barlow pumped water in breach of the embargo and consequently committed an offence.¹⁴⁰ Although the Court found Barlow was reckless in committing the embargo offence,¹⁴¹ it is hard to imagine Barlow being deterred from future embargo breaches, when the fear of being caught arguably did not arise because Barlow did not avert

¹³⁶ David Brown and others, *Criminal Laws* (6th edn, Federation Press 2015) 31.

¹³⁷ Prison Reform Trust, *Prison: The Facts* (Bromley Briefings, Summer 2019)

<<http://www.prisonreformtrust.org.uk/Portals/0/Documents/Bromley%20Briefings/Prison%20the%20facts%20Summer%202019.pdf>> accessed 21 December 2019; Ministry of Justice, *Proven Reoffending Statistics Quarterly: April to June 2017* (UK Government, 2019) table C1a.

¹³⁸ See John Halliday, *Making Punishments Work: Report of a Review of the Sentencing Framework for England and Wales* (UK Government, July 2001); Anthony N Doob and Cheryl Marie Webster, ‘Sentencing Severity and Crime: Accepting the Null Hypothesis’ (2003) 30 *Crime and Justice* 143.

¹³⁹ However, it is conceded that as water theft is a generic term, there may be some water offences falling under the term that may admit of such a classification. Nevertheless, the numbers are unlikely to be great.

¹⁴⁰ *Water NSW v Barlow* [2019] NSWLEC 30, [63]

¹⁴¹ See *Water NSW v Barlow* [2019] NSWLEC 30, [63].

his mind to the fact that he was committing an offence in the first place and further, he did not know that his metering equipment was seriously faulty.¹⁴²

In summary, the deterrent value of criminalisation becomes less convincing, the more the issue is unpacked. In the water context, whether criminalising unauthorised water take would be likely to deter future offenders in general or a specific offender, is largely uncertain, assumed rather than proven.

Punishment/ Retribution

Yet, another reason often used to justify criminalisation of certain conduct or acts is that criminalisation provides a mechanism for punishment. This argument relies on a *quid pro quo*. It suggests that if a person offends, then they deserve to be punished, invoking a just deserts philosophy. Such an argument is understandable and has some appeal, indeed from the 1980s onwards with the faltering of the rehabilitative ideal,¹⁴³ retributivism and just deserts have become the dominant justification for punishment in Anglo-American jurisprudence and legal philosophy. There is a measure of fairness about the just deserts approach and, being 'backward-looking' and concerned only with culpability for the offence, it is unconcerned with potential forward-looking effects such as deterrence or rehabilitation. It is thus primarily a moral position that does not depend on empirical or research-based proof or justification, which perhaps enhances its appeal to some moral philosophers, some victims and the popular media.

Rehabilitation

Another, forward-looking argument is that of rehabilitation, that the application of criminal punishment may lead to positive, corrective behaviour.¹⁴⁴ Rehabilitation is too complex a concept and process to adequately summarise here and any rehabilitative effect actually achieved depends largely on the quality of programs and supervision both inside and outside the prison, and on post release assistance in reintegration, rather than the simple fact of being subject to imprisonment or a community sanction. However, at a crude level, high recidivism figures call the practical achievement of both deterrence and rehabilitation, into question.

Criminalisation and its concomitant punishment, may give victims and the general public a sense of satisfaction ('the offender got what was coming to him/her') but whether that punishment has wider benefits for society is not well established. It may be that there are other non-criminal methods of punishment that are more effective in bringing offenders to a state of acknowledgement of wrongdoing and of remorse from where changed behaviours may be developed and emerge. It may also be that other non-criminal punishment involves fewer stigmas and consequently enhances the process of re-integration following guilty findings or guilty pleas. Although, the process of re-integration is likely to be more difficult following incarceration, even criminal punishment which involves financial penalties and the recording of a criminal offence (as is the case with water theft) means that offenders may find it difficult to secure work, find housing or take a loan, for example. If the intention is to

¹⁴² *Water NSW v Barlow* [2019] NSWLEC 30, [66].

¹⁴³ Victor Bailey, *The Rise and Fall of the Rehabilitative Ideal, 1895-1970* (Routledge2019).

¹⁴⁴ For a comprehensive collection of articles on rehabilitation see, Pamela Ugwuodike and others (eds), *The Routledge Companion to Rehabilitative Work in Criminal Justice* (Routledge2020).

reduce water theft (and perhaps other crimes, too), it will be important for those offenders to feel that they have a stake in the society in which they live. Their 'buy-in' may become a significant preventative tool but that tool will not be available if the ostracism associated with criminality cannot be readily shed.

Whilst sentencing matrices, minimum sentences and strict liability crimes, for example, may have superficial appeal and initially seem satisfying because they lead to quick, easy responses, ultimately, they may be found to be less effective and indeed counter-productive in various ways. Sentencing matrices and minimum sentences curtail judicial discretion and infringe the principle of individual justice, while strict liability, in removing *mens rea* as a requirement of establishing culpability, diminishes the moral force of conviction as a breach of collective mores. Further, society bears the cost of dealing with ex-criminals and the scars of retribution make re-integration harder, a point made forcefully by Braithwaite in his seminal work on the subject.¹⁴⁵ In his critique of retributivism he argues for 'reintegrative shaming' rather than expulsion and exclusion.

Of course, shaming is a tool that may be used within the criminal justice system or outside it but it is important to this discussion because it challenges the efficacy of the just deserts approach to punishment and criminalisation. Reintegrative shaming calls on offenders' feelings of shame to make them appreciate the impact of their actions and it encourages behaviours that are arguably likely to reduce re-offending.¹⁴⁶

Arguing for criminalisation on the basis that it provides a vehicle for punishment also runs the risk of sentences becoming long, human rights being infringed by means of poor incarceration conditions, inadequate in-prison educational and rehabilitative programs and insufficient post release support, and the expense of incarceration borne by the state escalating. At present this argument is, however, only theoretical in the water theft context because to date, in NSW, water theft does not involve the loss of liberty as a form of punishment, with fines being the standard penalty. If we are concerned to bring about or enhance an offender's awareness of the moral wrongdoing against the community of water theft, then some forms of community service or corrections order involving the offender spending 'X' hours working with agencies such as the Environmental Defenders' Office, local council or Indigenous organisations concerned with environmental protection, sustainability and river remediation, would arguably hold more promise than fines.

Problems with criminalisation

The above discussion on the rationale for criminalisation serves to highlight both criminalisation's benefits and disadvantages, both generally and more specifically as they relate to aspects of water management. The discussion also reveals that criminal law, like many legal sub-disciplines will not necessarily provide quick, effective and desirable outcomes. It is a tool that works best when operating in tandem with other governance tools such as education, the media, family pressure and medical interventions. It is simply incapable of 'fixing' everything. Indeed, Brown et al state that '[c]riminal law is not the

¹⁴⁵ John Braithwaite, *Crime, Shame and Reintegration* (Cambridge University Press 1989).

¹⁴⁶ John Braithwaite, *Crime, Shame and Reintegration* (Cambridge University Press 1989).

civilising cement which holds society together and prevents anti-social unleashing of egoism and plunder that 'human nature' would otherwise dictate.'¹⁴⁷

Yet, despite its failings and weaknesses, there is clearly still a potential role for criminal law. For example, going back to Duff's point on a joint moral enterprise, criminal law may send the signal that in a hot, dry, water-poor country such as Australia, taking water to which one is not entitled is morally wrong and is conduct that society will not condone. On Duff's account, criminalisation should involve identification of conduct as a public rather than private matter; 'as implicating some part of the polity's civil order, to which the polity therefore has in principle the standing to intervene';¹⁴⁸ the conduct is wrongful and the polity has 'reason to call those who engaged in it to formal, public, censorial (and possibly punitive) account'.¹⁴⁹ Further, having established all these conditions, it will then be necessary to consider whether there is good reason to criminalise the conduct in question, rather than responding in other ways, which involves an examination 'of the practicalities of doing so'.¹⁵⁰

Tensions

The water narrative above which, includes doctrinal law, aspects of the regulatory and governance framework for water abstractions and a review of criminalisation as a tool to address certain unacceptable water-related conduct, reveals several tensions. Those tensions include sharing versus selfishness, secrecy versus transparency, markets versus public administration and individualism versus the common good. Space does not permit consideration of them all. Hence, two have been selected in order to highlight some of the issues with which law and policy makers need to deal if better water governance is to be achieved.

Sharing v selfishness

The idea of sharing is captured in the objects of the *WA* and the *MDBP*, and specifically in the concept of SDLs. As discussed above, SDLs ultimately provide for limits on individual water abstractions, so that water (and the ecosystems associated with water) are protected for the whole community, both present and future. The SDL concept is dependent on understandings that promote a healthy ecosystem for all to share and enjoy. In this sense water is treated as fundamental to our common (shared) heritage. Yet, this notion of sharing often tends to rub up against notions of selfishness and individualism in the water context. Notions of selfishness and individualism are arguably embedded in calls for a triple bottom line (economic, political and environmental) approach to the interpretation of the *WA*'s requirement that the volume of consumptive water take be reduced. At first glance, the triple bottom line approach may seem balanced and reasonable, but the arguments in favour of it often disguise a lack of willingness by irrigators and others to alter plans for their

¹⁴⁷ David Brown and others, *Criminal Laws* (6th edn, Federation Press 2015) 31.

¹⁴⁸ Anthony Duff, *The Realm of Criminal Law* (Oxford University Press 2018) 333.

¹⁴⁹ Anthony Duff, *The Realm of Criminal Law* (Oxford University Press 2018) 333.

¹⁵⁰ Anthony Duff, *The Realm of Criminal Law* (Oxford University Press 2018) 333. For an important new account which locates criminalisation not in moral wrongfulness and the aims of retributive punishment but in an historically derived and institutionally constituted aim of 'securing the civility of civil order', see Lindsay Farmer, *Making the Modern Criminal Law: Criminalization and Civil Order* (Oxford University Press 2016) 299.

own private enterprises; alterations which, if effectuated, would enhance water management because there would be fewer consumptive abstractions.

The arguments for a triple bottom line interpretation of the WA's provisions commonly proceed on the basis that recovering less water for the environment is advantageous because it would benefit farming, which would in turn, benefit the economy and ultimately society as a whole.¹⁵¹ Yet, Walker has described attempts to interpret water recovery under the WA along these lines as 'pernicious',¹⁵² observing that the triple bottom line approach tends to reflect a lack of willingness to engage in water recovery as a joint enterprise, agreed democratically by the people and enshrined by parliament via its law making role.¹⁵³ Instead, a proper interpretation of the WA would, according to Walker, privilege the environment over other factors such as the economy and politics. He observes the Act recognises that interests may be 'harmed (at least financially)' but the provisions that potentially cause such harm are important to the implementation of the Act's 'cardinal feature, that less water will be taken than in the past – measured from an historical base line (in 2009)'.¹⁵⁴

Hence, the triple bottom line approach, that initially may seem fair and balanced, potentially disguises (a) a lack of willingness to adapt to a new environmental order, (b) a proclivity for selfishness and (c) the pursuit of individual advantage. According to Walker, it is 'hard not to travesty the argument'.¹⁵⁵

Irrigators highlighted personal or selfish interests in the symbolic burning of the 2010 MDB Guide referred to above and it would seem that the sentiments expressed in that symbolic act are still active. The 2019 blockade of Parliament House in Canberra, by the 'Can the Plan' lobby, embodies similar sentiments. That lobby demands a reduction in the volume of water to be returned to the environment, so that more water will be available to farmers, irrigators and others.¹⁵⁶ Whilst it is possible to feel some sympathy for food growers whose livelihoods are affected by reduced consumptive water availability, if there is not a healthy

¹⁵¹ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 20 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019. (Walker Report).

¹⁵² Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 20 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019. (Walker Report).

¹⁵³ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 20 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019. (Walker Report).

¹⁵⁴ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 20 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019. (Walker Report).

¹⁵⁵ Bret Walker, *Murray Darling Basin Royal Commission Report* (29 January 2019) 20 <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> accessed 23 October 2019. (Walker Report).

¹⁵⁶ See Kath Sullivan, 'Can the Plan' convoy heads to Canberra calling for end to Murray-Darling Basin Plan' (ABC Rural: 2 December, 2019) <<https://www.abc.net.au/news/2019-12-02/can-the-plan-convoy-converges-on-canberra/11751398>> accessed 21 December 2019.

river system into the future, all food production will be threatened. Hence, short term interests may need to yield in favour of long-term environmental objectives.

However, perhaps the most obvious example of selfishness and individualism is exemplified in the actual acts of unauthorised water take outlined above. Offenders such as Barlow, whose conduct Preston J categorised as reckless, demonstrate a lack of respect for sharing water resources with other water users and the environment. They place their own, individual needs and desires above those of the wider community, so inviting their crimes to be characterised as crimes against the commons.

Transparency v Secrecy

Transparency and secrecy also emerge as tensions in the water context. The Matthews Report revealed a culture of secrecy within regulatory institutions such as WaterNSW.¹⁵⁷ Its most senior bureaucrat, Gavin Hanlon, for example, sought to support the Harrises' attempt not to divulge their water take records and he was even willing to lobby for legislative change in that regard. The Four Corners program discussed above, also reported that Hanlon resisted requests by investigators in his department to approve a major operation intended to uncover who was stealing MDB water by siphoning off billions of litres without authorisation.¹⁵⁸ (Hanlon resigned shortly after these and other allegations were aired.)

Had a culture of secrecy not prevailed, it is likely that the Harrises' unauthorised take would have come to public attention sooner. It may also have been the case that greater transparency could have acted as a disincentive to crime in the first place. Arguably, however, the institutional secrecy of regulatory bodies helped foster criminal acts such as Barlow's. The secrecy model was excoriated by the Matthews Report and its recommendations that called for greater transparency, particularly in regard to water records being stored in one place and in a readily accessible form. Further, the interim MDB Chief Inspector, Keelty's investigation into conflicts of interest including those in relation to difficult-to-discover political donations to parties responsible for developing water policy and in relation to the links between politicians and companies associated with properties, where seemingly inflated prices have been furtively negotiated and paid by government for the buy-back of water licences for the environment¹⁵⁹ also highlights this tension. While property owners may stand to benefit from secretly negotiated water buy back deals, the details of which are not debated in parliament, nor publicly available, the effectiveness of water policy aimed at restoring water to the environment is threatened. Secrecy may not only lead to nepotism and a lack of confidence in the system, but it may, in extreme cases, lead to corruption and crime. Effective water governance, therefore, needs to address this tension.

¹⁵⁷ See discussion under heading above of 'Water Theft Allegations'.

¹⁵⁸ ABC, Four Corners, *Pumped* <<https://www.abc.net.au/4corners/pumped/8727826>> accessed 15 August 2019.

¹⁵⁹ Mary Anne Slattery and Rod Campbell, 'That's Not How You Haggle', *The Australia Institute Report into Water*, March, 2019 <<https://www.tai.org.au/sites/default/files/P502%20That%27s%20not%20how%20you%20haggle.pdf>> accessed 21 December 2019; Jackson Gothe-Snape, *The Guardian*, 'Everything we know about water buybacks, Barnaby Joyce and Angus Taylor—and the things we still don't', 23 April, 2019 <[abc.net.au/news/2019-04-23/water-buybacks-everything-we-know/11037798](https://www.abc.net.au/news/2019-04-23/water-buybacks-everything-we-know/11037798)> accessed 21 December, 2019.

‘The deep story; the narrative as felt’ and the rationalist fallacy

If concern that the criminalisation of unauthorised abstractions is not leading to desired outcomes and that competing tensions have not been adequately resolved, it may be helpful to engage alternative or complementary approaches to the problem of water theft (and perhaps other water-related criminal activity, too). For example, instead of thinking about unacceptable behaviour as responding to rationality and logic, as some of the arguments on deterrence seek to do, it may be helpful to explore the idea that *emotion* plays a more significant role in accounting for, or explaining human conduct than law and governance has recognised to date. In other words, feelings may underpin conduct, guide actions and inform responses, more than present policies, regulation, and law and governance acknowledge.

Arlie Hochschild’s sociological immersion research (albeit in a very different context) may offer insights in this regard.¹⁶⁰ Hochschild explores what she calls the ‘great paradox; that is why those on the American¹⁶¹ right support policies and laws that do not serve them well. Why do they act against their own interests? In employing a sociological, rather than political perspective, her work explores how the ructions, the great divide, in American society ‘feels’ to people on the right of politics. Her interest is, therefore, in the emotion that lays behind the politics.¹⁶²

One of the many questions Hochschild poses resonates with the environmental concerns of this article. She asks why a particular man, whose home and community had been lost to a sinkhole caused by a lightly-regulated drilling company, would still reject regulation, including regulation for environmental protection?¹⁶³ Why would this man and many others like him, be anti-big government and why is government seen as the enemy of community and individual economic advancement?

In exploring possible answers to these questions, it becomes clear how easy it is for those not sharing these views to be judgmental and attribute such views to a lack of intellect or understanding. If only the holders of these positions understood the rational effects of their positions, they would change their views and behaviour. But such an approach devalues the right’s responses and may even help entrench them. Taking such a judgmental approach does not support the development of empathy and ‘the collective capacity to hash things out’ on which ‘a healthy democracy depends.’¹⁶⁴ Meanwhile, the preferred, rationalist approaches commonly employed to resolve environmental and other tensions, such as those in the water space, have done little to assist understandings of otherness. People continue to act in ways that challenge logic and rationality as the above discussion on the deterrent value of sentencing demonstrates. That irrigators might steal water and

¹⁶⁰ Arlie Russell Hochschild, *Strangers in Their Own Land* (The New York Press 2016).

¹⁶¹ American here refers to the United States of America.

¹⁶² Arlie Russell Hochschild, *Strangers in Their Own Land* (The New York Press 2016) ix.

¹⁶³ Arlie Russell Hochschild, *Strangers in Their Own Land* (The New York Press 2016) 5. This is the story of Mike Schaff.

¹⁶⁴ Arlie Russell Hochschild, *Strangers in Their Own Land* (The New York Press 2016) 8.

contribute to over-consumption rather than protect the interests of their children and grandchildren is yet another example of logic losing out. Rationality or logical understanding may not always be the predominant reasons guiding people's behaviour.

Instead of a rationalist approach, Hochschild suggests that it is important to know the other's 'deep story; the narrative as felt'.¹⁶⁵ Knowing how people 'feel' and getting into their skin (or shoes) may provide greater insights into grievances, motivations and behaviour. In turn, this knowledge may help open up alternative approaches to governance, including water governance.

Hochschild's research revealed deep stories imbued with feelings of exclusion, marginalisation and extreme frustration that the traditional tool of social mobility, hard work, no longer seemed effective. It no longer produced outcomes (such as home ownership and savings) that lead to feelings of security. The narrative as felt also revealed feelings of anger about others (particularly marginalised or minority groups) 'cutting in line' and gaining advantage over the right, displacing them. Yet, she found that, in reality, there is significant common ground between the left and the right on a number of issues. They each experience a sense of dissatisfaction, disenchantment and disenfranchisement and they do not think the other side understands them. An 'empathy wall' has grown up and it militates against finding that common ground.¹⁶⁶

Hochschild's ideas, foreign as they possibly are to many lawyers, legislators and policy makers, may have some relevance in the water theft context. Getting into the skin of the thief – knowing their deep story – may permit greater understanding (but not exculpation) of why water thieves steal, why they are prepared to ignore licence conditions, broken meters or embargoes and take water. Their deep story may, for example, reveal a genuine concern that compliance with the SDLs will cause irrigator thieves to lose their businesses, so leading to family and community breakdown, as well as possible physical and mental health issues. Hence, it may perhaps be deep-seated fear and desperation that lead to defiant, reckless and reproachable behaviour such as water theft. If that is so, reliance on a range of mechanisms beyond the criminal law may be useful in modifying that behaviour. For example, it may be helpful to offer free psychological counselling, a waiver of (public) school fees, subsidised or free school lunches to relieve financial pressure, limited term interest-free farm loans, anger management programs, enhanced on-farm allowances, petrol subsidies, food packages, accountancy support, career re-training, community-building activities or courses on alternative land uses. Allowing the thieves' fears and grievances to be heard and genuinely appreciated, that is for the 'empathy wall' to be broken down, may be the first step in devising better (perhaps non-criminal) mechanisms to prevent or at least, reduce unacceptable water appropriation. However, this alternative or complementary approach will require open-mindedness along with a genuine interest in personal stories, an approach somewhat unfamiliar to many legislators, lawyers and policy makers. As Hochschild puts it:

¹⁶⁵ Arlie Russell Hochschild, *Strangers in Their Own Land* (The New York Press 2016) v.

¹⁶⁶ Arlie Russell Hochschild, *Strangers in Their Own Land* (The New York Press 2016) 5.

‘We, on both sides wrongly imagine that empathy with the ‘other side brings an end to clearheaded analysis when in truth, it’s on the other side of that bridge that the most important analysis can begin’.¹⁶⁷

Conclusion

As noted in the Introduction much discussion of environmental crimes is pitched at a macro level, whereas this article has focussed on the micro level of water theft, in a single jurisdiction. The aim has been to address a series of questions and issues around the desirability and adequacy of criminalisation as a tool of governance and social policy. It was hoped that such a focus would be more revealing of complexity, of context and of tensions of competing interests.

As Australia is an extremely dry country it is very important to limit and control water abstractions, particularly in that country’s food bowl, the MDB. If some people take water in an unauthorised manner (commonly known as water theft), their acts potentially impact unfavourably on other users and the environment.

Hence, a complex web of law and regulation has been developed with the aim of regulating water take, as the sections on ‘reducing consumption’ and SDLs, in particular, demonstrate. Against the established legal and regulatory backdrop governing water take, and in light of Australia’s harsh and dry conditions,¹⁶⁸ water theft, may be seen as a serious act. It commonly reflects recklessness, defiance and a lack of respect for the governance tools that seek to share water equitably and sustainably among a broad community of users including the environment.

Although the Australian water theft story may not include the drama of water lords, water cartels and the violence of attacks on civil water systems, as is the case in some other jurisdictions,¹⁶⁹ the particular geographical and hydrological conditions in Australia (where, for example precipitation is low and evaporation high)¹⁷⁰ mean that the unauthorised take of this life-sustaining resource, is serious. Indeed, it reveals a narrative of selfishness, recklessness and, in terms of inter-generational equity, short-sightedness. That narrative was explored here by reference to the Four Corners program highlighting incidents of possible water theft, the Matthews Report (investigating some possible water theft incidents and regulatory ineptitude), the Walker Report (stressing the importance of SDLs) and the prosecutions of two irrigators, the Harrises and Barlow, for example. This article also considered how a lack of political and/or economic will to monitor effectively, combined with weak regulation, may impact on the capacity to prosecute successfully.

¹⁶⁷ Arlie Russell Hochschild, *Strangers in Their Own Land* (The New York Press 2016) xi.

¹⁶⁸ Evidence of Australia’s harsh and dry conditions may be seen in the degree to which the December, 2019 and January, 2020 bushfires took hold. See BBC News, ‘Latest Photos of Devastating Bushfires’ <<https://www.bbc.co.uk/news/in-pictures-50971879>> accessed 2 January 2020.

¹⁶⁹ For example in Palestine, Syria, India, Iraq, Yemen, Sahel region of Africa and Ukraine. See Peter Gleick and Charlie Iceland, The Pacific Institute, ‘Water is a Source of Growing Tension and Violence in the Middle East’ (2018) <<https://pacinst.org/water-is-a-source-of-growing-tension-and-violence-in-the-middle-east/>> accessed 2 January 2020.

¹⁷⁰ Alex Gardner, Richard Bartlett, Janice Gray and Rebecca Nelson, *Water Resources Law* (2nd edn, LexisNexis 2018) 4.

Criminalisation was discussed as a key governance tool in the area of unauthorised water take. Yet criminalisation revealed both strengths and weaknesses. They were discussed, as was the underlying question: why criminalise? A key consideration was whether criminalisation would lead to desired outcomes. The answer to that question remains uncertain, particularly in the water context. While on one hand, a fear of being caught may arguably deter some behaviours, leading for example, to a greater number of water users 'play[ing] by the rules of the game', it may also 'erode trust between water agencies and users'.¹⁷¹ Further, where proper technological monitoring is prohibitive or otherwise impractical for example, building local, contextualised community-based bonds and trust, perhaps through Indigenous and/or environmental networks such as the EDO, may be what encourages compliant behaviour¹⁷² rather than the strict hand of the criminal law. The emerging water narrative exposed a number of tensions with which law, regulation and governance more generally will need to deal. If these tasks prove beyond the criminal law, it may be that alternative or complementary approaches are beneficial. Hence, it may, for example, be helpful to rely on civil as well as criminal sanctions and it may also be helpful to employ bolder approaches, such as Arlie Hochschild's sociological immersion approach, which demands an understanding of others' (in this case water thieves') 'deep story; the narrative as felt'.¹⁷³ Understanding the emotions that drive water theft (getting into the skin of water thieves) may, in turn, open up fresh governance approaches that are less legalistic and more strategically fashioned to circumstance, context and desired outcomes.

It may also be that redressing the problem of water theft to some extent at least, involves re-shaping the way actual and potential offenders think about unauthorised water take and use, so that their activities are not characterised as 'getting away with it' or 'out-smarting the system' but rather as the acts of cheating by someone, who does not play fair. If offenders feel shameful or remorseful, as opposed to admired as larrikins or proud of their bold anti-authority exploits, we may see a reduction in water theft. In an ideal world such a re-envisioning of water theft, may also involve a re-conceptualisation of water resources themselves, so that water and nature more generally, are not seen as needing to be tamed, conquered and beaten¹⁷⁴ but rather as part of the common heritage of humankind that is

¹⁷¹ Juan C Castilla-Rho and others, 'Sustainable groundwater management: How long and what will it take?' (2019) 58 *Global Environmental Change* 101972, <<https://doi.org/10.1016/j.gloenvcha.2019.101972>> accessed 23 December 2019, 1, 'relying on Gelcich et al., 2006; Jones and Andriamarovololona, 2008; Ostrom, 1990; Ostrom and Walker, 2005). Available via www.elsevier.com/locate/gloenvcha

¹⁷² Juan C Castilla-Rho and others, 'Sustainable groundwater management: How long and what will it take?' (2019) 58 *Global Environmental Change* 101972, <<https://doi.org/10.1016/j.gloenvcha.2019.101972>> accessed 23 December 2019. 1.

¹⁷³ Arlie Russell Hochschild, *Strangers in Their Own Land* (The New York Press 2016) xi.

¹⁷⁴ See J Gray, 'Legal Approaches to the Ownership, Management and Regulation of Water From Riparian Rights to Commodification' 1(2) 2006 *Transforming Cultures eJournal*, p76; also B Walker, *Murray Darling Basin Royal Commission Report*, South Australia, 29-1-2019, p 11 refers to a history of seeing water as a 'servant' or 'enemy' <<https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>> Accessed 6-9-2019

worthy of protection, so permitting enjoyment, not just for present users but also for future generations.¹⁷⁵

¹⁷⁵ See J Rockstrom et al, 'Planetary Boundaries: Exploring the Safe Operating Space for Humanity'(2009) 14(2): 32 Ecology and Society <http://www.ecologyandsociety.org/vol14/iss2/art32/>