# Rethinking the 'Carceral Creep' in Water Governance: Enforcement, Accountability and Restorative Possibilities in Australia's Murray-Darling Basin

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## ABSTRACT

This paper interrogates water theft in Australia as a lens through which to explore the 'carceral creep' in environmental governance. Situating its analysis in the context of growing international reliance on punitive responses to environmental harm, it examines the deliberate choice to frame unlawful water use as 'theft', arguing that this language shapes governance responses, constructs water as property, and both illuminates and obscures the victims of water misuse. Comparing responses to water theft in New South Wales and Victoria within Australia's Murray-Darling Basin, where market-based governance has created strong financial incentives for non-compliance, it contrasts New South Wales's dedicated compliance body and use of enforceable undertakings with Victoria's more conventional enforcement model. Situating these practices within broader critiques of carceral logic and environmental restorative justice, the paper argues that criminal and restorative approaches may be more complementary than oppositional, with institutional design playing a critical enabling role.

**Key words:** Water theft; water governance; criminalisation; carceral logic; restorative justice; enforceable undertakings; reparative justice



## 1. INTRODUCTION

As law's failure to curb serious environmental harm becomes harder to deny, governments are turning to criminal law to fill the accountability gap. In Australia, this shift is particularly observable in legal responses to water theft. Escalating scarcity, declining river health, recurring droughts, and intensifying competition for limited flows, particularly across the

Murray–Darling Basin, have heightened political and public scrutiny.[1] Since 2020, New South Wales alone has conducted more than 7,600 investigations into water offences,[2] and Victoria has announced a 'zero tolerance' approach.[3] In July 2025, a cotton farmer in the neighbouring jurisdiction of Queensland, John Norman, was sentenced to 9.5 years in prison, with a three-year non-parole period for his role in an $8.7 million water fraud dating back to a period between 2010 and 2016. The sentence of Norman (and the lesser sentences handed down to his two former colleagues) attracted significant media attention and commentary and highlighted the increasing intersection between criminal and environmental law in Australia.

In this paper, we examine the treatment of water theft in New South Wales and Victoria to explore some of the key drivers of this shift towards criminalising environmental harm and critically evaluate debates around its potential, limitations, and risks. In so doing, we interrogate the deliberate choice to frame unlawful water use as 'theft', examining how this language shapes governance responses, constructs water as property, and both illuminates and obscures the victims of water misuse. We situate these dynamics within the context of Australia's market-based water governance, where the high financial value of water creates both the incentive for non-compliance and the conditions under which more creative, restorative responses may emerge. Drawing on this comparative analysis, we advance a central hypothesis: that the severity of criminal sanctions may, paradoxically, support the effectiveness of restorative and reparative measures, by creating the coercive backdrop against which enforceable undertakings and relational repair mechanisms acquire their force. If correct, this would suggest that punitive and restorative approaches to environmental harm are more complementary than the existing literature tends to assume, at least within market-based governance systems where financial incentives for non-compliance are strong.

The paper continues as follows. In Part 2, we briefly introduce the methods used in this paper. Part 3 then explores the emergence of carceral logic as a response to environmental

[1] See, eg, from ABC, 'Four Corners—Pumped: Who Is Benefitting from the Billions Spent on the Murray-Darling?' (2017) <https://www.abc.net.au/4corners/pumped/8727826>; Murray-Darling Basin Authority, 'The Murray-Darling Basin Water Compliance Review: Containing Reports by the Murray-Darling Basin Authority and the Independent Review Panel' (Murray-Darling Basin Authority 2017) <<https://www.mdba.gov.au/sites/default/files/pubs/MDB-Compliance-Review-Final-Report.pdf>>; Katrina Clifford and Rob White, 'News Media Framing of the Murray-Darling Basin "water Theft" Controversy' (2021) 54 Journal of Criminology 365 <https://doi.org/10.1177/00048658211000094>.

[2] NSW Dept of Natural Resources Access Regulator, 'Compliance Activity Dashboard' (*NSW Natural Resources Access Regulator*, 2 December 2025) <https://www.nrar.nsw.gov.au/progress-and-outcomes/qrt-reports> accessed 9 March 2026.

[3] State Government of Victoria, 'Zero Tolerance To Water Theft In Victoria' (*Premier of Victoria*, 7 September 2020) <https://www.premier.vic.gov.au/zero-tolerance-water-theft-victoria> accessed 9 March 2026.

governance in general and water governance in particular. In Part 4, we turn to our case studies, first interrogating the consequences of framing unlawful water use as 'theft', and then unpacking the legislative frameworks and implementation practices of responses to water theft in New South Wales and Victoria. In Part 5, we consider how these case studies demonstrate both the limitations and possibilities of criminal justice, highlighting spaces for more creative and restorative responses alongside more traditional sanction regimes. Part 6 concludes and sets out an agenda for future research.

## 2. METHODS

This study adopts socio-legal methods to explore two case studies, which were selected because they represent contrasting institutional responses to the same underlying problem: both face comparable water theft challenges within the Murray-Darling Basin and operate under similar water policy frameworks. Both also operate a 'stepped approach' in which educative and cautionary responses precede formal enforcement action. However, New South Wales and Victorian governments have made different choices regarding the pursuit of accountability. By exploring the states' institutional variables in the context of similar challenges, we have been able to explore how regulatory architecture shapes approaches to accountability.

To contextualise these case studies in the global policy context, we have reviewed the scholarly literature on the growing trend of criminalising environmental harm (Part 3). We highlight some key emerging examples of this trend, including EU Environmental Crimes Directive,[4] the Council of Europe's Draft Convention on the Protection of the Environment through Criminal Law,[5] and the global campaign to criminalise ecocide as an atrocity crime. We then engage in a legal and policy analysis of key instruments, documents and data relevant to the current regulatory response to water theft in NSW and Victoria, including legislation, recent amendments, case law, policy guidance documents, and recent investigation and enforcement outcome data (Part 4). This method helped us to understand the regulatory frameworks being implemented and the drivers behind recent legal reforms in both jurisdictions, and to identify trends in how punitive mechanisms (criminal prosecution,

[4] Council of Europe, 'Directive (EU) of the European Parliament 2024/1203 and of the Council of 11 April 2024 on the Protection of the Environment through Criminal Law and Replacing Directives 2008/99/EC and 2009/123/EC' (2024) <http://data.europa.eu/eli/dir/2024/1203/oj/eng> accessed 5 May 2025.
[5] 'Draft Council of Europe on the Protection of the Environment through Criminal Law, Text Adopted by the Parliamentary Assembly on 10 April 2025 (16th Sitting)' (Council of Europe 2025) Doc. 16150.

fines, licence suspensions, civil penalty infringement notices) and restorative mechanisms (enforceable undertakings, remediation orders, publication orders, community-based sanctions) are being deployed.

Finally, drawing on the conceptual insights provided by the scholarly literature explored in Part 3, we critically analyse the implications of these contrasting trends and set out some preliminary observations regarding the relationship between criminal sanctions and restorative justice mechanisms (Part 5). While these observations are well supported by the investigation and enforcement outcome data, we note in our conclusion (Part 6) that further empirical and qualitative investigation would yield valuable insights into how enforcement and sanctioning decisions are made, the factors influencing the selection of punitive versus restorative responses, and their outcomes – particularly including how affected communities receive and respond to different accountability mechanisms.

## 3. THE 'CARCERAL CREEP' OF ENVIRONMENTAL GOVERNANCE

### 3.1. From enablement to punishment: the drivers of criminalisation

Environmental harms such as unsustainable natural resource use, the pollution of water, air and land, and the long-term impacts of fossil fuel extraction and use collectively represent the largest existential threat facing the planet.[6] How best to respond to this threat, and the role of law in any response, has been a matter of considerable debate.[7] Historically, many Indigenous Peoples appear to have approached environmental governance as one grounded in collective duties and reciprocal responsibilities,[8] with responses to harms tending to be grounded in restorative principles.[9] With European colonisation came the sustained disruption (although

[6] Vesselin Popovski, 'Climate Change as an Existential Threat: Translating Global Goals into Action' (2024) 54 Environmental Policy and Law 127 <https://doi.org/10.3233/EPL-239025>; Katherine Richardson and others, 'Earth beyond Six of Nine Planetary Boundaries' (2023) 9 Science Advances eadh2458 <https://doi.org/10.1126/sciadv.adh2458>.
[7] Angus Nurse, 'Contemporary Perspectives on Environmental Enforcement' (2022) 66 International Journal of Offender Therapy and Comparative Criminology 327 <https://doi.org/10.1177/0306624X20964037>.
[8] Irene Watson, 'Aboriginal Relationships to the Natural World: Colonial "protection" of Human Rights and the Environment' (2018) 9 Journal of Human Rights and the Environment 119 <https://doi.org/10.3316/informit.T202406050001480120584860O>.
[9] David R Goyes (ed), *Green Crime in the Global South* (Springer International Publishing 2023).

not erasure) of these governance practices,[10] and over the course of the 20th century a greater emphasis on formalised environmental governance has emerged across much of the world.[11]

Criminal law has historically played a limited role in responding to environmental harm.[12] When used, criminal sanctions have traditionally been attached to a failure to comply with domestic administrative law and regulations,[13] rather than existing as standalone criminal offences for causing environmental harm.[14] Put another way, law has a strong track record of enabling environmental harm, subject to regulatory control.[15] The reasons for this are well documented: many of the most significant environmental harms result from lawful business and state activities[16] within an economic model premised on resource extraction;[17] legal systems do not respond to all environmental harms equally and actively legitimate many;[18] the technical complexity of environmental regulation poses challenges for its integration into criminal law;[19] and the slow, diffuse manifestation of environmental harms makes attribution, causation, and damage difficult to establish.[20]

While acknowledging these challenges, many activists, lawyers, and scholars have argued that the impacts and the scale of environmental harms necessitate a stronger criminal justice

[10] Iokiñe Rodriguez, 'Restor(y)Ing the Past to Envision an "Other" Future: A Decolonial Environmental Restorative Justice Perspective' in Brunilda Pali, Miranda Forsyth and Felicity Tepper (eds), *The Palgrave Handbook of Environmental Restorative Justice* (Springer International Publishing 2022) <https://doi.org/10.1007/978-3-031-04223-2_21>.
[11] Rachel Killean and Lauren Dempster, *Green Transitional Justice* (Routledge 2025) ch 3.
[12] Michael J Lynch and Paul B Stretesky, *Exploring Green Criminology: Toward a Green Criminological Revolution* (Routledge 2016) <https://doi.org/10.4324/9781315581644>.
[13] Susan Lea Smith, 'Issues in Defining and Punishing Environmental Crimes: An Introduction' in Susan Lea Smith and Iina Sahramäki (eds), *Research Handbook on Environmental Crimes and Criminal Enforcement* (Edward Elgar Publishing 2024) 4.
[14] Michael Faure, 'A Paradigm Shift in Environmental Criminal Law' in Ragnhild Sollund, Christoph H Stefes and Anna Rita Germani (eds), *Fighting Environmental Crime in Europe and Beyond* (Macmillan Publishers 2016).
[15] Nurse (n 7).
[16] Steve Tombs and David Whyte, *The Corporate Criminal: Why Corporations Must Be Abolished* (Routledge 2015) <https://doi.org/10.4324/9780203869406>.
[17] Paul Stretesky, Michael Long and Michael Lynch, *The Treadmill of Crime: Political Economy and Green Criminology* (Routledge 2013) <https://doi.org/10.4324/9780203077092>; Michael J Lynch, 'Green Criminology and Environmental Crime: Criminology That Matters in the Age of Global Ecological Collapse' (2020) 1 Journal of White Collar and Corporate Crime 50 <https://doi.org/10.1177/2631309X19876930>.
[18] Rob White (ed), 'Thinking About Environmental Crime' *Elgar Encyclopedia of Environmental Crime* (Edward Elgar Publishing 2025); Paul Stretesky, Ekaterina Gladkova and Nathan Stephens-Griffin, 'Criminal Enforcement of Environmental Laws Cannot Deter Ecological Harm or Achieve Environmental Justice' in Susan Lea Smith and Iina Sahramäki (eds), *Research Handbook on Environmental Crimes and Criminal Enforcement* (Edward Elgar Publishing 2024).
[19] David Uhlmann, 'Environmental Crime Comes of Age: The Evolution of Criminal Enforcement in the Environmental Regulatory Scheme' [2009] Utah Law Review 1223. See also Curtis Fogel and Jan Lipovsek, 'Green Crime in the Canadian Courts: Issues and Controversies' (2013) 6 Journal of Politics and Law 48 <https://doi.org/10.5539/jpl.v6n2p48>.
[20] Uhlmann (n 19).

response.[21] Campaigns range from those focused on the criminalisation of specific acts (e.g. wild fauna and flora trades, water theft, or the use of particular pollutants), to justice demands in the aftermath of high profile environmental disasters, to broader calls for eco-justice.[22] Advocates have cited the contradictions at the heart of existing environmental regulation, the normative and expressive value of framing environmental harms as criminal, the need for greater deterrence in the face of growing ecological crises, and the desire for 'individuals, corporations, industries and governments' to be held accountable for their contributions to environmental crises.[23]

This growing interest in criminalisation has gradually come to be mirrored in practice; the past fifty years have seen the slow but steady emergence of 'carceral logic'[24] in environmental regulation.[25] This is evidenced by a proliferation of environmental offences[26] and specialised tribunals within domestic systems.[27] At an international level, it has been evidenced by high-profile endeavours such as the EU Environmental Crimes Directive,[28] the Council of Europe's Draft Convention on the Protection of the Environment through Criminal

[21] Rob White, *Crimes Against Nature: Environmental Criminology and Ecological Justice* (Willan 2013) <https://doi.org/10.4324/9781315880723>; Susan Mandiberg and Michael Faure, 'A Graduated Punishment Approach to Environmental Crimes: Beyond Vindication of Administrative Authority in the United States and Europe' (2009) 34 Columbia Journal of Environmental Law 447; Nigel South and Avi Brisman (eds), *Routledge International Handbook of Green Criminology* (1st edn, Routledge 2013) <https://doi.org/10.4324/9780203093658>.

[22] Eco-justice can be understood as comprising environmental justice (which refers to the right to a healthy environment), ecological justice (justice for the natural world) and species justice (justice for non-human animal species). See Rob White, *Environmental Harm* (Policy Press 2014); Robert D Bullard, 'Environmental Justice: It's More Than Waste Facility Siting' (1996) 77 Social Science Quarterly 493; Rob White, 'Environmental Victimology and Ecological Justice' in Dean Wilson and Stuart Ross (eds), *Crime, Victims and Policy: International Contexts, Local Experiences* (Palgrave Macmillan UK 2015) <https://doi.org/10.1057/9781137383938_3>.

[23] Rob White, 'Ecocide and the Carbon Crimes of the Powerful' (2018) 37 University of Tasmania Law Review 95.

[24] 'The control and punishment mindset that suggests criminalisation is the best paradigm to organise human life and to solve social problems' – Michael J Coyle and Mechthild Nagel, *Contesting Carceral Logic: Towards Abolitionist Futures Mechthild Nagel* (Routledge 2022) 1; Sometimes also referred to as 'penality' i.e. the mobilisation of penal laws, sanctions, institutions, practices and discourses, see Mattia Pinto, 'Historical Trends of Human Rights Gone Criminal' (2020) 42 Human Rights Quarterly 729.

[25] Smith (n 13) 7–8; Alessandro Corda, 'The Transformational Function of the Criminal Law: In Search of Operational Boundaries' (2020) 23 New Criminal Law Review 584, 622–625 <https://doi.org/10.1525/nclr.2020.23.4.584>.

[26] Lorenzo Segato, Walter Mattioli and Nicola Capello, 'Water Crimes Within Environmental Crimes' in Katja Eman and others (eds), *Water, Governance, and Crime Issues* (Springer 2020) 34 <https://www.springerprofessional.de/water-governance-and-crime-issues/18210502>.

[27] Reece Walters and Diane Solomon Westerhuis, 'Green Crime and the Role of Environmental Courts' (2013) 59 Crime, Law and Social Change 279 <https://doi.org/10.1007/s10611-013-9415-4>; J Michael Angstadt and Maddison S Schink, 'Specialist Environmental Courts and Tribunals: A Systematic Literature Review and Case for Earth System Governance Analysis' (2023) 18 Earth System Governance 100192 <https://doi.org/10.1016/j.esg.2023.100192>; Christina Voigt and Zen Makuch (eds), *Courts and the Environment* (Edward Elgar Publishing 2018).

[28] Council of Europe (n 4).

Law,[29] and the global campaign to criminalise ecocide as an atrocity crime.[30] The debates and discourses that have surrounded these initiatives share a view of criminal law as a viable response to not only discrete examples of environmental criminality, but to the climate and ecological crises facing our planet.[31] As such, they evidence a growing willingness to rethink what crime means in a time of crisis and inaction.[32] More broadly, the rise in environmental crimes can be placed within a trend of 'progressive punitivism'[33] in which governments turn to criminal law as a way of responding to a wide range of social ills.[34]

These trends have been critiqued for equating criminal law intervention with effective accountability, deterrence and rights protection.[35] As we explore further below, this equation is highly contestable.

## 3.2. The limitations and risks of carceral creep

Given the above trends, it is unsurprising that the shift towards environmental criminal law has been welcomed by some. It has been praised for offering a greater deterrent than civil or administrative environmental regulation,[36] for its expressive role in condemning environmental destruction,[37] and for enhancing environmental consciousness.[38] However,

[29] (n 5).
[30] See, eg, Polly Higgins, Damien Short and Nigel South, 'Protecting the Planet: A Proposal for a Law of Ecocide' (2013) 59 Crime, Law and Social Change 251 <https://doi.org/10.1007/s10611-013-9413-6>; Anastacia Greene, 'The Campaign to Make Ecocide an International Crime: Quixotic Quest or Moral Imperative?' (2019) 30 Fordham Environmental Law Review 1; Darryl Robinson, 'Ecocide — Puzzles and Possibilities' (2022) 20 Journal of International Criminal Justice 313 <https://doi.org/10.1093/jicj/mqac021>.
[31] Filippos Proedrou and Maria Pournara, 'Exploring Representations of Climate Change as Ecocide: Implications for Climate Policy' (2025) 25 Climate Policy 269 <https://doi.org/10.1080/14693062.2024.2368859>; Filippos Proedrou and Maria and Pournara, 'A Limited Green Criminological Turn in the EU Approach to Climate Change? Mapping Representations of Climate Change as Ecocide' (2024) 0 Journal of European Integration 1 <https://doi.org/10.1080/07036337.2024.2440875>.
[32] Rita Floyd, 'Environmental Security and the Case against Rethinking Criminology as "Security-Ology"' (2015) 15 Criminology & Criminal Justice 277 <https://doi.org/10.1177/1748895815584720>.
[33] Hadar Aviram, 'Progressive Punitivism: Notes on the Use of Punitive Social Control to Advance Social Justice Ends' (2020) 68 Buffalo Law Review 199.
[34] Sebastian Miller, 'Chains Don't Float: The Incompatibility of Carceral Logic and Environmental Justice' (2025) 49 Harvard Environmental Law Review 346. On the phenomenon of using criminal law to address social ills more general, see e.g. Benjamin Levin, 'Mens Rea Reform and Its Discontents' (2019) 109 Journal of Criminal Law and Criminology 491; Lindsay Farmer, *Making the Modern Criminal Law: Criminalization and Civil Order* (Oxford University Press 2016) <https://global.oup.com/academic/product/making-the-modern-criminal-law-9780199568642?cc=au&lang=en&> accessed 10 March 2026.
[35] Natasa Mavronicola, 'The Case Against Human Rights Penality' (2024) 44 Oxford Journal of Legal Studies 535, 541–43 <https://doi.org/10.1093/ojls/gqae013>.
[36] Uhlmann (n 19); Yun Wang and others, 'The Deterrence Effect of a Penalty for Environmental Violation' (2019) 11 Sustainability 4226 <https://doi.org/10.3390/su11154226>.
[37] Susan Hedman, 'Expressive Functions of Criminal Sanctions in Environmental Law' (1991) 59 George Washington Law Review 889.
[38] Corda (n 25).

increased criminalisation has also attracted a range of critiques, which can both overlap and exist in tension with one another. Some critiques remain aligned with the criminalisation project but highlight concerns around its implementation. For example, some contest the claims of enhanced deterrence, pointing to the lack of data regarding efficacy, and the inadequate or unequal enforcement of law.[39] Indeed, criminalisation exists alongside the dominance of markets, the emphasis on economic growth and the related incentivisation of theft or other environmentally damaging corporate choices.[40] Others raise concerns about overcriminalisation,[41] highlighting the challenge of identifying appropriate *mens rea,* the importance of ensuring the principle of legality when defining and prosecuting environmental crimes,[42] and the importance of maintaining the principle of *ultima ratio* (criminal law as a last resort).[43]

Some critics support some form of sanction for deliberate acts of environmental harm but object to policing, incarceration, or the involvement of criminal law at all. Drawing on broader abolition theories,[44] proponents of 'abolition ecology' argue that carceral logic is ideologically incompatible with the pursuit of environmental justice due to its disproportionate use against marginalised peoples and environmental activists,[45] and with the

[39] Stretesky, Gladkova and Stephens-Griffin (n 18); Celeste Cedillo and Juan Antonio Le Clercq, 'Green Impunity: Measuring Ecojustice, Institutional Capacities and Policy Design as an Approach to Environmental Security' *Handbook of Security and the Environment* (Edward Elgar Publishing 2021); Dr Joshua Ozymy and Dr Melissa Jarrell, 'Does the Criminal Enforcement of Federal Environmental Law Deter Environmental Crime? The Case of The U.S. Resource Conservation and Recovery Act' (2021) 11 Environmental and Earth Law Journal (EELJ) 65.

[40] Sally S Simpson and Jocelyn Evens, 'Corporate Environmental Non-Compliance and the Effects of Internal Systems and Sanctions' *Research Handbook on Environmental Crimes and Criminal Enforcement* (Edward Elgar Publishing 2024).

[41] Smith (n 13). On the overcriminalisation perspective more generally, see e.g. Erik Luna, 'The Overcriminalization Phenomenon' (2005) 54 American University Law Review 703.

[42] This concern has most recently emerged in the discussion around ecocide, see Matthew Gillett, 'Ecocide, Environmental Harm and Framework Integration at the International Criminal Court' (2025) 29 The International Journal of Human Rights 1009 <https://doi.org/10.1080/13642987.2024.2433660>.

[43] Sarah Zink, 'Ecocide as a New Core Crime in the Rome Statute? An Ultima Ratio Lens on Legal Policy in International Criminal Law' (2024) 24 International Criminal Law Review 128.

[44] See, eg, Anastasia Chamberlen and Henrique Carvalho, 'Feeling the Absence of Justice: Notes on Our Pathological Reliance on Punitive Justice' (2022) 61 The Howard Journal of Crime and Justice 87 <https://doi.org/10.1111/hojo.12458>; Critical Resistance (ed), *Abolition Now! Ten Years of Strategy and Struggle Against the Prison Industrial Complex* (AK Press 2008) <https://criticalresistance.org/42091-2/> accessed 24 March 2026; Angela Davis and Eduardo Mendieta, *Abolition Democracy: Beyond Empire, Prisons, and Torture* (2005) <https://sevenstories.com/books/2857-abolition-democracy> accessed 24 March 2026; Koshka Duff and Cat Sims, *Abolishing the Police* (Dog Section Press 2021) <https://www.dogsection.org/product/abolishing-the-police> accessed 24 March 2026; Sophie Rigney, 'Building An Abolition Movement for International Criminal Law?' (2024) 0 Journal of International Criminal Justice 1 <https://doi.org/10.1093/jicj/mqae008>.

[45] David N Pellow, 'Struggles for Environmental Justice in US Prisons and Jails' (2021) 53 Antipode 56 <https://doi.org/10.1111/anti.12569>; Elizabeth A Bradshaw, 'Tombstone Towns and Toxic Prisons: Prison Ecology and the Necessity of an Anti-Prison Environmental Movement' (2018) 26 Critical Criminology 407 <https://doi.org/10.1007/s10612-018-9399-6>.

pursuit of ecological justice due to the environmental impacts of the carceral state.[46] These critiques are ideological but also pragmatic. The complexity of the climate and ecological crises facing the planet mean that a meaningful response will need to be large-scale, multifaceted and transformational.[47] Against this backdrop, criminalisation's focus on individual liability can seem not only woefully inadequate, but unhelpfully distracting, seemingly addressing problems while ultimately preserving the broken status quo.[48] As critics of carceral logic have argued, an emphasis on criminal law can create a 'form of tunnel vision' that diverts attention from other meaningful tools of deterrence, reparation and accountability.[49]

## 3.3. Criminalisation: Foreclosing or facilitating alternative visions of justice?

While a focus on carceral logic has been challenged as overly restrictive, ill-suited to, or even incompatible with the pursuit of eco-justice,[50] such critiques should not be equated with a disinclination towards accountability or environmental enforcement.[51] Rather, calls for alternative forms of justice often emphasise deterrence, behavioural change, and reparations for harm.[52] This emphasis on repair and transformation is reflected in the turn (or return)[53] towards environmental restorative justice.[54]



[46] Alexander Dunlap and Andrea Brock (eds), *Enforcing Ecocide: Power, Policing & Planetary Militarization* (Springer International Publishing 2022) <https://doi.org/10.1007/978-3-030-99646-8> accessed 24 March 2026; Nathan Stephens-Griffin, 'Embracing "Abolition Ecology": A Green Criminological Rejoinder' (2023) 31 Critical Criminology 433 <https://doi.org/10.1007/s10612-022-09672-7>.
[47] Karen O'Brien and Linda Sygna, 'Responding to Climate Change: The Three Spheres of Transformation' *Transformation in a Changing Climate* (2013).
[48] Miller (n 34); Stretesky, Gladkova and Stephens-Griffin (n 18); For broader critiques on the ability of criminal justice to meet the needs of communities, see Yvette Russell, 'Criminal Injustice' in Illan rua Wall and others (eds), *The Critical Legal Pocketbook* (Counterpress 2021); and on the risks of focusing on individuals at the expense of structures, see Susan Marks, 'Human Rights and Root Causes' (2011) 74 Modern Law Review 57 <https://doi.org/10.1111/j.1468-2230.2010.00836.x>.
[49] Mavronicola (n 35) 553.
[50] Rob White, 'Environmental Harms and Innovative Justice' in Susan Lea Smith and Iina Sahramäki (eds), *Research Handbook on Environmental Crimes and Criminal Enforcement* (Edward Elgar Publishing 2024).
[51] White, 'Environmental Harms and Innovative Justice' (n 50).
[52] Daniel C Esty, 'Red Lights to Green Lights: From 20th Century Environmental Regulation to 21st Century Sustainability' (2017) 47 Environmental Law 1; Nurse (n 7); Pat O'Malley, 'Bentham in the Anthropocene' in Cameron Holley and Clifford Shearing (eds), *Criminology and the Anthropocene* (Routledge 2017).
[53] As noted above, many cultures have historically used forms of restorative justice. See John Braithwaite, *Restorative Justice and Responsive Regulation* (Oxford University Press 2022); On the risks of oversimplifying this history, see Chris Cunneen, 'Reviving Restorative Justice Traditions?' in Gerry Johnstone and Daniel W Van Ness (eds), *Handbook of restorative justice* (Willan Publishing 2007).
[54] Miranda Forsyth and others, 'A Future Agenda for Environmental Restorative Justice?' (2021) 4 The International Journal of Restorative Justice 17 <https://doi.org/10.5553/TIJRJ.000063>.

Environmental restorative justice is concerned with promoting harmonious relationships between offenders, victims and the broader community, and is premised on the consensual involvement of all participants.[55] It is an approach that emphasises repairing harm and 'reintegrative shaming', a form of accountability that is accompanied by opportunities for the offender to make amends,[56] thus creating space for positive changes in future.[57] A related justice framework is environmental *reparative* justice. This shares restorative justice's focus on responding to harm but recognises that seeking the restoration of relationships may be challenging or even inappropriate in some instances (e.g. in cases of crimes of the powerful).[58] Reparative justice might therefore incorporate reparative sanctions into a more coercive/state-enforced context, rather than requiring consensual engagement.[59]

Interestingly, within our current market-based system, these more creative, restorative measures often do seem to rely on the shadow of criminal sanction for their efficacy. This dynamic overlaps with the notion of 'therapeutic jurisprudence', whereby criminal law sanctions incorporate forms of repair and rehabilitation beyond punishment.[60] Advocates of restorative and/or reparative approaches have explored their application both within and outside formal criminal justice systems.[61] In relation to the former, Australia has been a key site of research, due to its states' incorporation of restorative/reparative elements into their responses to environmental crime.[62] For example, restorative justice is envisioned as a process that may inform sentencing, and has been used in the New South Wales Land and



[55] Mark Hamilton, *Environmental Crime and Restorative Justice* (Palgrave Macmillan 2021); On restorative justice more generally see Tony F Marshall, 'The Evolution of Restorative Justice in Britain' (1996) 4 European Journal on Criminal Policy and Research 21 <https://doi.org/10.1007/BF02736712>.
[56] See, eg, John Braithwaite, 'Restorative Justice and Reintegrative Shaming' in Cecilia Chouhy, Joshua C Cochran and Cheryl Lero Jonson (eds), *Criminal Justice Theory, Volume 26: Explanations and Effects* (Routledge 2020).
[57] Brunilda Pali, Miranda Forsyth and Felicity Tepper (eds), *The Palgrave Handbook of Environmental Restorative Justice* (Palgrave Macmillan 2022) <https://doi.org/10.1007/978-3-031-04223-2>.
[58] Rob White, 'Reparative Justice, Environmental Crime and Penalties for the Powerful' (2017) 67 Crime, Law and Social Change 117 <https://doi.org/10.1007/s10611-016-9635-5>.
[59] White, 'Environmental Harms and Innovative Justice' (n 50).
[60] Carrie C Boyd, 'Expanding the Arsenal for Sentencing Environmental Crimes: Would Therapeutic Jurisprudence and Restorative Justice Work?' (2008) 32 William & Mary Environmental Law and Policy Review 483.
[61] See, eg, Hamilton (n 55); Forsyth and others (n 54).
[62] Hamilton (n 55); Justice Nicola Pain and others, 'Restorative Justice for Environmental Crime: An Antipodean Experience' *International Union for Conservation of Nature Academy of Environmental Law Colloquium 2016* (2016); Rob White, 'Indigenous Communities, Environmental Protection And Restorative Justice' (2015) 18 Australian Indigenous Law Review 43; Brian J Preston, 'The Use of Restorative Justice for Environmental Crime.' (2011) 35 Criminal Law Journal 136 <https://doi.org/10.3316/agispt.20113070>.

Environment Court in cases of forestry offences and Aboriginal cultural heritage prosecutions involving environmental harms.[63]

Another such example, explored further below, is the use of enforceable undertakings. These involve a 'legally binding agreement, commitment or promise made by an alleged offender/responsible party (individual or corporation) in lieu of the imposition of a penalty for breaching statutory duties.'[64] The goal of these instruments is to facilitate compliance with environmental regulations while also responding to the harm caused by a breach.[65] In Australia, enforceable undertakings are currently in operation in New South Wales,[66] Victoria,[67] the Commonwealth,[68] Australian Capital Territory,[69] Queensland[70] and the Northern Territory.[71] As Miranda Forsyth and Felicity Tepper outline, enforceable undertakings have the potential to be responsive to the specifics of the harm caused, as well as enabling offenders to take action to prevent the recurrence of harm in the future.[72] From an accountability perspective, it is interesting to note the emerging practice to require an offender to apologise, acknowledge responsibility and/or commit to changing behaviours, and to make the enforceable undertakings public.[73] In contrast to the formal accountability offered by a criminal prosecution, such measures have been described as offering a 'more diffuse, informal, deliberative accountability to the public and particular parties with an interest in the matter.'[74]

Internationally, similar combinations of punitive and reparative sanction are emerging. The EU Directive mentioned above provides for relatively substantial custodial and financial



[63] *Environment Protection Authority v Forestry Corporation of New South Wales (No 3)* NSWLEC [2026] 25 (NSW Land and Environment Court); Miranda Forsyth, Brunilda Pali and Felicity Tepper, 'Environmental Restorative Justice: An Introduction and an Invitation' in Brunilda Pali, Miranda Forsyth and Felicity Tepper (eds), *The Palgrave Handbook of Environmental Restorative Justice* (Springer International Publishing 2022) <https://doi.org/10.1007/978-3-031-04223-2_1> accessed 27 October 2023.
[64] Miranda Forsyth and Felicity Tepper, 'Environmental Enforceable Undertakings: An Innovative Tool to Repair and Prevent Environmental Harm' (2024) 36 Journal of Environmental Law 385, 386 <https://doi.org/10.1093/jel/eqae021>.
[65] Forsyth and Tepper (n 64).
[66] Protection of the Environment Operations Act 1997 (New South Wales) s 253A.
[67] Environment Protection Act 2017 (Victoria) pt 11.2.
[68] Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth) ss 486DA&486DB.
[69] Environment Protection Act 1997 (Australian Capital Territory) pt 14A.
[70] Environmental Protection Act 1994 (Queensland) pt 5.
[71] Environment Protection Act 2019 (Northern Territory) pts 9, Div 6.
[72] Forsyth and Tepper (n 64) 391–395.
[73] Forsyth and Tepper (n 64) 396–397, 399.
[74] Forsyth and Tepper (n 64) 406; citing Christine Parker, 'Restorative Justice in Business Regulation? The Australian Competition and Consumer Commission's Use of Enforceable Undertakings' (2004) 67 The Modern Law Review 209, 239.

sanctions[75] with a range of optional forward-looking and reparative responses, from withdrawal of permits and exclusion from public funding to environmental restoration and the publication of judicial decisions.[76] For those seeking stronger carceral responses, the inclusion of non-criminal sanctions can be perceived as a 'watering down' or a failure to 'appropriately address environmental crime'.[77] Yet, these alternative approaches are not necessarily less severe.[78] In fact, they place 'significant obligations and accountabilities' on the offender, turning them from a passive recipient of penalties into an active agent in responding to harm.[79]

We argue that these hybrid/punitive approaches invite questions around efficacy and justice: for example, whether criminalisation can effectively prevent environmental harms by itself, whether it offers much in the way of environmental justice for affected communities, and how it might sit alongside alternative justice approaches. From this perspective, the question is not so much whether penalties need to be higher and harsher, but whether more attention needs to be paid to the design, implementation and reception of sanctions and responses. In Part 4 below, we consider this question in relation to the specific context of water theft in Australia's Murray-Darling Basin, after first briefly exploring the implications of framing unlawful water use as a crime of 'theft'.

## 4. CASE STUDIES: WATER THEFT IN AUSTRALIA'S MURRAY-DARLING BASIN

Unlawful or illegal use of water occurs in both rural and urban contexts, and has been documented in many countries.[80] Although there is still 'no common definition as to what constitutes water theft',[81] Felbab-Brown defines it as 'any taking of water in violation of

[75] Council of Europe (n 4) art 5(2)(a) & (b) and 7(3)(a).
[76] Council of Europe (n 4) art 5(3) and 7(2).
[77] WWF and others, 'Member States against Strong EU Rules to Penalise Environmental Crimes' (*World Wide Fund for Nature (WWF)*, 9 December 2022) <https://www.wwf.eu/?8400366/Member-States-against-strong-EU-rules-to-penalise-environmental-crimes> accessed 5 May 2025.
[78] Pain and others (n 62) 17.
[79] White, 'Environmental Harms and Innovative Justice' (n 50).
[80] Alexander Baird, Reece Walters and Rob White, 'Water Theft Maleficence in Australia' (2021) 10 International Journal for Crime, Justice and Social Democracy 83 <https://doi.org/10.5204/ijcjsd.v10i1.160>; Guido Schmidt and others, 'How to Tackle Illegal Water Abstractions? Taking Stock of Experience and Lessons Learned' (Fundación Botín 2020).
[81] Vanda Felbab-Brown, 'Water Theft and Water Smuggling: Growing Problem of a Tempest in a Teapot?' (Brookings Institute 2017) <https://www.brookings.edu/wp-content/uploads/2017/03/fp_201703_water_theft_smuggling.pdf>.

existing regulations'.[82] Unlawful extraction of water can include 'breach of extraction conditions, construction of works to take water illegally, tampering with meters to relay false readings, and contravening declared water restrictions',[83] all of which can result in a water user taking more water than allowed, or taking it at a time when they would not otherwise be legally allowed to.

The idea that water has a rightful, just, or legitimate 'owner', and the corollary, that those who are none of those things will seek to take it from those who are, has been part of water law and water discourse since Roman times.[84] In law, theft requires a person to (1) *dishonestly appropriate property* that (2) *belongs to another person*, with (3) the *intention of permanently depriving* the other person of it. Our first question is thus whether the unlawful use of water can (or should) be considered as a form of 'theft'.

White argues 'environmental crime needs to be defined and studied in relation to harm, and not solely on the basis of legal definitions',[85] which suggests we should not be overly concerned with whether what is described as water 'theft' meets the legal standard of theft. However, we argue that the choice to name unlawful use of water as 'theft' is deliberate, and are interested in understanding the consequences of doing so.

Water 'theft' could involve the unlawful appropriation of a physical volume of water, which would easily meet the legal elements of theft, as with any other item of tangible personal property.[86] However, 'water theft' is generally used to describe misappropriation of water on a much larger scale and in a wider variety of ways – taking water in circumstances other than those set out in the water licence or water entitlement.[87] Felbab-Brown argues that individuals taking water for any purpose, including basic human needs, can constitute theft, and that '[u]nauthorized taking of water from wetlands or rivers [or] drilling unauthorized connections

[82] Felbab-Brown (n 81) 3.
[83] Samantha Bricknell, 'Environmental Crime in Australia' (Australian Institute of Criminology 2010) 104.
[84] Alexander Baird and Reece Walters, 'Water Theft Through the Ages: Insights for Green Criminology' (2020) 28 Critical Criminology 371 <https://doi.org/10.1007/s10612-020-09526-0>; Adrian-Marius Vladu, 'The Theft of Water from the Aqueducts of the City of Rome in Frontinus' Time' (2017) 3 Revista CICSA online, Serie Nouă 4.
[85] Rob White, 'Water Theft in Rural Contexts' (2019) 5 International Journal of Rural Criminology 140, 142 <https://doi.org/10.18061/1811/88725>.
[86] See, eg, Malcolm Sutton, 'Nearly 200,000 Litres of Water Stolen from Adelaide Hills Tanks, Residents Say' *ABC News* (29 April 2025) <https://www.abc.net.au/news/2025-04-29/water-thefts-reported-in-adelaide-hills-dry-period/105229760> accessed 24 March 2026.
[87] Janice Gray, '"Thieves, Shady Deals and Murder": Water Theft, Buy-Backs and Fish Kills in the Murray Darling Basin of Australia' in Laura Westra, Klaus Bosselmann and Matteo Fermeglia (eds), *Ecological Integrity in Science and Law* (Springer 2020) <https://doi.org/10.1007/978-3-030-46259-8>; A Loch and others, 'Grand Theft Water and the Calculus of Compliance' (2020) 3 Nature Sustainability 1012 <https://doi.org/10.1038/s41893-020-0589-3>; Schmidt and others (n 80).

to water pipes, should also be viewed as theft'.[88] For any of these actions to meet the formal definition of theft, the water must be the property of someone else, such as the city, the water authority, or the environment, which is not necessarily the case.[89]

Water justice advocates also classify the ability of corporations to obtain the rights to extract large volumes of water (often at no or relatively low costs) as a form of theft.[90] This argument is based on the idea that such extractions represent an illegitimate enclosure or appropriation of a public resource for private gain. This action by the corporations is certainly designed to permanently deprive others of water, but when, for example, Nestlé extracts water from a spring in accordance with a government-issued licence, it would argue it is acting within the law. Nonetheless, in circumstances where the local community is opposed to the ongoing extraction, has no safe drinking water, or where the laws governing the authority to issue a water extraction permit to Nestlé are contested,[91] the *injustice* of enabling water to be extracted for corporate gain is clear. In labelling this socially illegitimate extraction as a form of water 'theft', water justice advocates contest the ability of the state to consent on behalf of those who bear the brunt of the lost water – Indigenous People, local communities, and even the environment itself.

Water 'theft' therefore encompasses a range of possible scenarios and the choice to frame any of those scenarios as water theft is a deliberate one. We argue that using the language of water 'theft' has at least four consequences. First, labelling an unlawful take of water as 'theft' is a powerful rhetorical device that shifts the language from bureaucratic (unlawful or non-compliant use) to criminal. This label is itself an engine of 'carceral creep'; it supplies the moral and rhetorical infrastructure through which punitive governance responses become not only possible but expected. This can have deterrent effects but also has real justice implications. In the following sections our examination of water laws in New South Wales



[88] Felbab-Brown (n 81) 3.
[89] See discussion on water as a form of property in, for example, Lee Godden, 'Property in Urban Water: Private Rights and Public Governance' in Patrick Troy (ed), *Troubled Waters: Confronting the Water Crisis in Australia's Cities* (ANU Press 2008) <https://doi.org/10.22459/TW.06.2008.08>; Avril Horne, Erin O'Donnell and Rebecca E Tharme, 'Mechanisms to Allocate Environmental Water' in Avril C Horne and others (eds), *Water for the Environment: from Policy and Science to Implementation and Management* (Academic Press 2017) <https://doi.org/10.1016/B978-0-12-803907-6.00017-6>; Anita Foerster, 'Victoria's New Environmental Water Reserve : What's in a Name?' (2007) 11 Australasian Journal of Natural Resources Law and Policy 145.
[90] Maude Barlow and Tony Clarke, *Blue Gold: The Battle Against Corporate Theft of the World's Water* (Stoddart 2002); Alan Snitow, Deborah Kaufman and Michael Fox, *Thirst: Fighting the Corporate Theft of Our Water* (Jossey-Bass 2007).
[91] Alexandra Shimo, 'While Nestlé Extracts Millions of Litres from Their Land, Residents Have No Drinking Water' *The Guardian* (2018) <https://www.theguardian.com/global/2018/oct/04/ontario-six-nations-nestle-running-water>.

and Victoria, two states in Australia's Murray-Darling Basin, demonstrates how framing unlawful water take as theft supports increased prosecutorial responses and the imposition of higher penalties.

Second, the language of 'theft' can help to highlight the victim: who should have received the water that has now been stolen? In the highly bureaucratised settings in which unlawful water use often occurs, such as Australia's Murray-Darling Basin, shifting the language can expose the otherwise hidden social and environmental harms of unlawful water use. For example, the 2019 Murray-Darling fish kills were described using the language of theft: '[w]ater has been 'stolen' by some irrigators… and fish in the Menindee Lakes have been 'murdered' by their thousands. The picture is a disturbing one'.[92] Focusing on the victims emphasises that water theft is more than the non-compliance with a set of rules and regulations regarding when and how water may be accessed: it has real consequences for the health of the environment, for downstream water users, and for those whose rights have not been given adequate consideration within existing settler-state laws, such as Indigenous Peoples.[93] Indeed, it has been argued that water theft is one of the most significant sources of harm to the river systems of the Murray-Darling Basin.[94]

Third, the concept of 'theft' requires that water be considered as 'property' that can be misappropriated. Even if we follow White's argument that environmental crime should focus on harm rather than strict legal definitions, we should be aware of how this language creates and maintains a view that water is a commodity that may be owned by individuals. In places like Chile, water is already explicitly defined as private property,[95] but in places like Australia it is not. As has been demonstrated in Chile, the constitutional implications of treating water as property severely limits the ability of governments to alter use-rights to water to improve the sustainability of water ecosystems or address distributive justice issues.[96]



[92] Gray (n 87).
[93] Bricknell (n 83); Gray (n 87); Loch and others (n 87); Schmidt and others (n 80); White, 'Indigenous Communities, Environmental Protection And Restorative Justice' (n 62).
[94] Alexander Baird and others, 'Water Theft in Australia's Murray-Darling Basin: Offender Motivations and Criminal Justice Outcomes' [2025] Journal of Criminology <https://doi.org/10.1177/26338076251331234>.
[95] Manuel Prieto, MC Fragkou and M Calderón, 'Water Policy and Management in Chile' in PA Maurice (ed), *Encyclopedia of Water: Science, Technology, and Society* (John Wiley & Sons, Inc 2019) <10.1002/9781119300762.wsts0055>.
[96] Carl J Bauer, 'Water Conflicts and Entrenched Governance Problems in Chile's Market Model' (2015) 8 Water Alternatives 147. On the Australian context see Douglas Fisher, 'Common Law and Public Domain Approaches to Water Governance – an Australian Perspective' *Water Resource Management and the Law* (Edward Elgar Publishing 2017) <https://doi.org/10.4337/9781785369834.00008>; Samantha Hepburn, 'Statutory Verification of Water Rights: The "Insuperable" Difficulties of Propertising Water Entitlements' (2010) 19 Australian Property Law Journal 1.

Fourth, water theft focuses on the action of the individual (the 'thief'). In circumstances where water theft is endemic because of poor water accounting, poor enforcement, or rent seeking,[97] focus on the individual can obscure the systemic problems. This framing also valorises the existing legal frameworks and decisions to grant water rights as just and legitimate. In settler colonial countries, the foundations of settler state water law face a legitimacy problem as they are contested by Indigenous Peoples, who have never ceded their rights to water.[98] Further (as noted above), where basic human rights to water are not being met, framing the unlawful use of water by individuals for drinking and sanitation as 'theft' positions the state-sanctioned rights of corporate or commercial users above the human right to water.[99]

In adopting the 'water theft' framing for unlawful take of water, Australian jurisdictions are entrenching a specific construction of water: as a valuable, individually owned, property right. The unlawful taking of this water is also being framed as both illegal and immoral, as reflected by increasingly large financial penalties. However, this framing is deeply colonial and carceral, as it assumes the status quo of water access in Australia is just, and that severe punitive responses will both reduce the incentives for, and address the harm caused by, water theft. In this way, the water theft framing appears to foreclose alternative, restorative responses to the harm caused, as well as pathways towards alternative constructions of water and human relationships with it. A simplistic response would be to conclude that we face a binary choice between adopting criminal accountability measures (and entrenching the status quo) or adopting alternative, restorative measures (to facilitate pathways to transformative water justice). In contrast, our analysis of the legal response to water theft in the Murray-Darling Basin tells a more complicated story.



[97] R Quentin Grafton and John Williams, 'Open Access: Rent-Seeking Behaviour and Regulatory Capture in the Murray-Darling Basin, Australia' *Global Water Resources* (Routledge 2021) <https://doi.org/10.4324/9781003179498-21>; Cameron Holley and Darren Sinclair, 'Governing Water Markets: Achievements, Limitations and the Need for Regulatory Reform' (2016) 33 Environmental and Planning Law Journal 301.

[98] Virginia Marshall, *Overturning Aqua Nullius: Securing Aboriginal Water Rights* (Aboriginal Studies Press 2017); E O'Donnell, 'Water Sovereignty for Indigenous Peoples: Pathways to Pluralist, Legitimate and Sustainable Water Laws in Settler Colonial States' (2023) 2 PLOS Water e0000144 <https://doi.org/https://doi.org/10.1371/journal.pwat.0000144>.

[99] Katherine Meehan, 'Disciplining De Facto Development: Water Theft and Hydrosocial Order in Tijuana' (2013) 31 Environment and Planning D: Society and Space 319 <https://doi.org/10.1068/d20610>.

## 4.1. Water theft in the Murray-Darling Basin

Australia's Murray-Darling Basin catchment covers over 1 million square kilometres, stretching across four states and one territory. Over 2.4 million people live in the Basin, including people from 50 First Nations. The Murray-Darling Basin supports rich and varied more-than-human communities, including 16 internationally significant wetlands and over 120 species of water birds.[100]

The Murray-Darling Basin is also known as Australia's 'foodbowl', generating around 40% of its agricultural produce, mostly through irrigation.[101] There are almost 12,000 gigalitres (GL) of water entitlements on issue in the Basin,[102] of which over 7,400 GL are located in the southern Basin, which includes Victoria, New South Wales and South Australia. For irrigators to access water in the southern Murray-Darling Basin, they must have either a permanent water access entitlement (i.e. ongoing rights to an exclusive share of the water) with an available water allocation (which is issued by the relevant water authority), or they must acquire a water allocation (temporary) from another water entitlement holder.[103]

Enabling water markets has been a national priority for Australian governments since the National Water Initiative in 2004 and has led to the establishment of the world's largest water market.[104] This cap-and-trade system aims to achieve efficient allocation while maintaining environmental flows,[105] though its effectiveness remains contested. In 2007, in response to the worsening Millennium Drought, water trade suddenly and dramatically increased in the southern Murray-Darling Basin, as irrigators were desperate to access more water. The southern Basin now has one of the most active water markets in the world, and accessing water is increasingly expensive.[106] In 2025, the market value of the water entitlements in the

[100] Murray-Darling Basin Authority, 'The Basin' (15 September 2025) <https://www.mdba.gov.au/basin> accessed 24 March 2026.
[101] Murray-Darling Basin Authority, 'Our Reliance on the Basin for Water' (2024) <https://www.mdba.gov.au/basin/why-murray-darling-basin-matters/our-reliance-basin-water> accessed 26 March 2026.
[102] Murray-Darling Basin Authority, 'Current Diversion Limits for the Basin' (24 November 2025) <https://www.mdba.gov.au/water-use/water-limits/current-diversion-limits-basin> accessed 24 March 2026.
[103] See, eg, Water Act 1989 (Vic) ss 33E, 33U, 33AC.
[104] R Quentin Grafton, James Horne and Sarah Ann Wheeler, 'On the Marketisation of Water: Evidence from the Murray-Darling Basin, Australia' (2016) 30 Water Resources Management 913 <https://doi.org/10.1007/s11269-015-1199-0>; Sarah Ann Wheeler and Dustin E Garrick, 'A Tale of Two Water Markets in Australia: Lessons for Understanding Participation in Formal Water Markets' (2020) 36 Oxford Review of Economic Policy 132 <https://doi.org/10.1093/oxrep/grz032>.
[105] Holley and Sinclair (n 97).
[106] Wheeler and Garrick (n 104).

southern Murray-Darling Basin were valued at almost $32 billion AUD.[107] In 2024-25, there was over $770 million in entitlement trade (the transfer of permanent water entitlements) and the price of high reliability water entitlements varied between $4,309-$9,022 per megalitre (ML).[108] The same year, there was $235 million in allocation trade. The average price for temporary water trade in the southern Murray-Darling Basin during this period was $115-177 per ML.[109]

In 2017, approximately ten years after water trade significantly increased, water theft hit the headlines in Australia.[110] Until that time, it had been largely assumed that regular meter reading by water authorities was adequate to ensure that water was not being taken unlawfully. But the combination of increasing water scarcity and rising water prices created strong incentives for some irrigators to take water to which they had no legal right.[111] Research has now identified multiple drivers of water theft, including economic incentives where the value of stolen water exceeds potential penalties,[112] the over-allocation of water rights,[113] climate change intensifying water scarcity,[114] weak enforcement and regulatory capture,[115] and cultural acceptance of water diversion as a 'folk crime', i.e. not particularly criminal, offensive, harmful or dangerous.[116]

In July 2017, Australia's national public television station, the ABC, broadcast the results of an investigation into water resource management in New South Wales.[117] This program made serious allegations of water 'theft' and maladministration of water resources by public service employees in New South Wales.[118] In response, the New South Wales Government

[107] Benjamin Williams and others, 'Water Markets Report: 2024-25 Review and 2025-26 Outlook' (Ricardo Pty Ltd 2025) <<https://www.ricardo.com/media/fecnorhi/2025-ricardo-water-markets-report_final.pdf>>.
[108] Williams and others (n 107).
[109] Williams and others (n 107).
[110] Baird, Walters and White (n 80).
[111] Ken Matthews, 'Independent Investigation into NSW Water Management and Compliance: Final Report' <https://www.industry.nsw.gov.au/__data/assets/pdf_file/0019/131905/Matthews-final-report-NSW-water-management-and-compliance.pdf>.
[112] Constantin Seidl and Sarah Ann Wheeler, 'Breaking Water Laws in the Murray-Darling Basin: Understanding Water Compliance Challenges and Stakeholder Perceptions' (2024) 60 Water Resources Research 1.
[113] Anita Foerster, 'The Murray-Darling Basin Plan 2012: An Environmentally Sustainable Level of Trade-Off?' (2013) 16 Australasian Journal of Natural Resources Law and Policy 41.
[114] Seidl and Wheeler (n 112).
[115] R Quentin Grafton and John Williams, 'Rent-Seeking Behaviour and Regulatory Capture in the Murray-Darling Basin, Australia' (2020) 36 International Journal of Water Resources Development 484 <https://doi.org/10.1080/07900627.2019.1674132>.
[116] Rob White, 'Re-Conceptualising Folk Crime in Rural Contexts' in Joseph F Donnermeyer (ed), *The Routledge International Handbook of Rural Criminology* (Routledge 2016) <10.4324/9781315755885.CH29>.
[117] From ABC, 'Four Corners—Pumped: Who Is Benefitting from the Billions Spent on the Murray-Darling?' (2017) <https://www.abc.net.au/4corners/pumped/8727826>.
[118] Schmidt and others (n 80).

commissioned a retired senior public servant, Ken Matthews, to review both the specific examples of water theft and maladministration from the ABC investigation and water compliance in New South Wales more broadly.[119] In addition to legislative reform that increased penalties and improved the evidence base to enable enforcement, Matthews' reports recommended the establishment of a new agency with responsibility for compliance and enforcement of water laws in New South Wales.[120] This Natural Resources Access Regulator (NRAR) has since been established.

At the same time, the Australian Senate investigated the impact of water theft on the integrity of the water market, and noted that, in addition to the challenges presented by unlawful use to the operation of water markets, there were 'legal concerns … about water rights, land rights and personal property, and the difficulties these may present in determining what constitutes 'water theft''.[121] The Murray-Darling Basin Authority also reviewed compliance and enforcement across the Basin, and uncovered significant gaps in compliance evidence (largely due to inadequate water metering), as well as highly variable compliance and enforcement regimes between jurisdictions.[122] In response, the Commonwealth Government created a new position, Inspector General of Water Compliance,[123] to improve transparency and accountability in water management across the Basin.

Researchers have identified further substantial barriers to the effective enforcement of water laws, including inadequate oversight,[124] legal and regulatory gaps that allow offenders to escape prosecution,[125] regulatory capture and successful rent-seeking.[126] Empirical research conducted in New South Wales in 2016, for example, found that cultural and political constraints, limited resources, and legislative issues hindered effective enforcement.[127] Similarly, analysis of compliance data from the Murray-Darling Basin revealed that the average probabilities of audit detection and prosecution for water theft between 2018/19 and

[119] Matthews (n 111).
[120] Matthews (n 111).
[121] Senate Rural and Regional Affairs and Transport References Committee, 'Integrity of the Water Market in the Murray-Darling Basin' (Commonwealth of Australia 2018) 4 <<https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/MurrayDarlingPlan/~/media/Committees/rrat_ctte/MurrayDarlingPlan/Report/report.pdf>>.
[122] Murray-Darling Basin Authority, 'Water Compliance Review' (n 1).
[123] Water Act 2007 (Cth) s 215B.
[124] Sarah Wheeler and others, 'The Rebound Effect on Water Extraction from Subsidising Irrigation Infrastructure in Australia' (2020) 159 Resources, Conservation & Recycling 1 <https://doi.org/10.1016/j.resconrec.2020.104755>; White, 'Water Theft in Rural Contexts' (n 85).
[125] Baird and others (n 94); Seidl and Wheeler (n 112).
[126] Baird, Walters and White (n 80); Clifford and White (n 1); Grafton and Williams (n 115).
[127] Holley and Sinclair (n 97).

2020/21 were low, leading to an average real expected penalty value well below existing market prices.[128] The inadequacy of penalties to serve as a deterrent has been a particular focus,[129] with some arguing that fines effectively function as a 'fee-for-service'.[130] Like the Murray-Darling Basin Authority, Baird and others also highlight that the inconsistency of penalties between jurisdictions creates incentives for strategic non-compliance.[131]

Reflecting international trends around the criminalisation of environmental harm,[132] scholars who are supportive of criminal law approaches emphasise the symbolic and deterrent value of criminalisation,[133] while acknowledging structural failures that undermine its effectiveness.[134] In response to these acknowledged failures, there has been increasing emphasis on the need to increase research and resources to combat water theft in the Murray-Darling Basin, and to implement stronger deterrents including increased penalties and reduced water entitlements for repeat offenders.[135]

Despite the unsettled nature of the law regarding whether water is private property in the Murray-Darling Basin,[136] the terminology of water 'theft' to describe unlawful take and use of water has taken hold in Australia, in both news media[137] and academic research.[138] We now turn to two of the jurisdictions: New South Wales and Victoria, for a more in-depth analysis of their water theft laws and implementation data. We have chosen these two jurisdictions for two main reasons: (1) they include the majority of water access entitlements, water use and water trade in the southern Murray-Darling Basin; and (2) they both use strong rhetoric against water theft, but have adopted very different institutional responses to the problem.



[128] Seidl and Wheeler (n 112).
[129] Baird and others (n 94); Loch and others (n 87).
[130] Baird and others (n 94).
[131] Baird and others (n 94).
[132] White, 'Water Theft in Rural Contexts' (n 85); Rob White, 'Global Warming and Criminological Theory and Practice'.
[133] White, 'Water Theft in Rural Contexts' (n 85); Baird and others (n 94); White, 'Global Warming and Criminological Theory and Practice' (n 132).
[134] Clifford and White (n 1).
[135] Baird and others (n 94); White, 'Water Theft in Rural Contexts' (n 85).
[136] DE Fisher, 'Water Law, the High Court and Techniques of Judicial Reasoning' (2010) 27 Environmental and Planning Law Journal 85.
[137] Michael Slezak, 'Murray-Darling Basin Authority Knew of Allegations of Water Theft a Year before ABC Report' *The Guardian* (Murray-Darling Basin, 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 24 March 2026.
[138] Gray (n 87); Loch and others (n 87); Baird and others (n 94).

## 4.2. Responding to water theft in New South Wales

As noted above, in 2017, the New South Wales Government responded to water theft concerns by passing legislation to create new offences regarding the take of water without a water access entitlement (or temporary water allocation), or in contravention of the conditions of that entitlement (Table 1).[139] In addition to providing greater clarity, these offences also reversed the onus of proof, so that evidence of use is now assumed to be evidence of water take, and the occupier of a property is assumed to be responsible for the water take, unless proven otherwise (Table 1). In November 2025, the New South Wales Government almost doubled the relevant penalties by creating additional civil penalties, resulting in maximum fines of almost $5 million for individuals and $10 million for corporations (Table 1).

**Table 1** Institutional and legal responses to water theft in New South Wales

| Institutional response | Legal outcomes |
|---|---|
| **New offences** | • s 60A: intentionally/ negligently/ strict liability taking water without access licence or not authorised by licence<br>• s 60B: non-compliance with licence conditions<br>• s 60C: intentionally/ negligently/ strict liability taking water without sufficient water allocation<br>• s 60D: taking water without an authorised water access point (or not using authorised point)[140] |
| **Increased fines** | • Individual: 2 years in prison or $561K-$1.2M, or up to $4.95M in civil penalties (s 363B, s 370F)<br>• Corporation: $2.2M- $5.6M (strict liability lower end), or up to $9.999M in civil penalties (s 363B, s370F)<br>• s 60G: fines can be up to 5 times the value of water stolen[141] |
| **Reversal of onus of proof** | s 60 E: evidence of use assumed to be evidence of take; occupier assumed to be responsible unless proven otherwise[142] |
| **New prosecutor** | Natural Resources Access Regulator, with prosecutorial powers[143] |

In 2017, the New South Wales Government also created the Natural Resources Access Regulator (NRAR), a new statutory body corporate with specific responsibilities to ensure 'effective, efficient, transparent and accountable compliance and enforcement measures' and

[139] Natural Resources Access Regulator Act 2017 (NSW).
[140] Water Management Act 2000 (NSW).
[141] Water Management Act 2000 (NSW).
[142] Water Management Act 2000 (NSW).
[143] Natural Resources Access Regulator Act 2017 (NSW) ss 10, 11.

'maintain public confidence' in natural resources management, including water.[144] From 2019-2025, NRAR was extremely active, with over 7,600 investigations of suspicious activity reports initiated, leading to over 2600 enforcement actions. These included 600+ penalty notices, 800+ directions and enforceable undertakings, and 100+ convictions recorded (Table 2).

**Table 2** NRAR activity from 30 June 2019 to 30 June 2025[145]

| **Enforcement action** | **2019-20** | **2020-21** | **2021-22** | **2022-23** | **2023-24** | **2024-25** |
|---|---|---|---|---|---|---|
| Suspicious activity reports | 150 | 1606 | 1716 | 1531 | 2629 | 2643 |
| Investigations finalised | 1377 | 1179 | 752 | 774 | 1024 | 831 |
| Inspections | 638 | 473 | 133 | 372 | 395 | 508 |
| Enforcement actions (total includes all actions in rows below) | 502 | 480 | 349 | 213 | 542 | 539 |
| Formal warnings and official cautions | 173 | 217 | 129 | 108 | 237 | 249 |
| Penalty notices | 149 | 170 | 69 | 67 | 73 | 80 |
| Directions and enforceable undertakings | 166 | 85 | 148 | 34 | 231 | 198 |
| Prosecutions commenced | 14 | 8 | 3 | 4 | 1 | 2 |
| Convictions recorded[146] | 28 | 33 | 5 | 36 | 2 | 27 |



[144] Natural Resources Access Regulator Act 2017 (NSW) ss 4, 10.
[145] Natural Resources Access Regulator, 'Compliance Activity Dashboard' (*NSW Government Natural Resources Access Regulator*, 2025) <https://www.nrar.nsw.gov.au/progress-and-outcomes/qrt-reports> accessed 8 October 2025; Natural Resources Access Regulator, '2019-22 Compliance Dashboard' (*NSW Government Natural Resources Access Regulator*, 2024) <https://www.nrar.nsw.gov.au/progress-and-outcomes/qrt-reports/compliance-dashboard> accessed 8 October 2025.
[146] Note: convictions for 2024-25 obtained from Natural Resources Access Regulator (2025) *Progress Report 2024-25*, NSW Government. Available from <https://www.nrar.nsw.gov.au/progress-and-outcomes/progress-reports> and accessed 26 March 2026.

NRAR exercises a range of enforcement powers and, on average, finalises almost 1000 investigations per year, about half of which generate enforcement action (warnings, penalty notices, directions and enforceable undertakings, and prosecutions) (Table 2).

The prosecutions concern a range of offence provisions under Chapter 3 'Water Management' (including Part 2 'Access licences', and Part 3 'Approvals'), and Chapter 7 'Enforcement actions'. For example, common cases include taking water without approval, taking water when metering equipment was not operating properly, or engaging in controlled works without approval (such as constructing an unlawful dam) (see specific provisions listed in Table 1).

Cases were heard at a local court or the New South Wales Land and Environment Court. The defendant often entered a guilty plea, so the judgments mostly concern sentencing, including consideration of the objective seriousness of the offence and subjective circumstances (including aggravating and mitigating factors), consistency in sentencing, and the totality principle. In every case where a conviction was recorded, a fine was imposed, but the amounts vary widely.[147] A common factor for the more severe penalties is the finding that the offending conduct was deliberate, and a corresponding need to penalise the conduct for specific and general deterrence. Courts also usually imposed costs for NRAR's investigation and legal expenses. Significantly, it was also common for the court to make a publication order, requiring the defendant to detail the conviction and consequences in the local newspapers at their own expense. In limited cases, where appropriate, the court imposed a remediation order, such as the removal of an unlawful dam or a vegetation plan for cleared areas.

Prosecutions are a relatively rare response to water theft. In 2023-25, eight prosecutions were finalised, with fines ranging from $1,750 to $562,000, plus NRAR's legal costs, criminal conviction, and public notice of the outcome (Table 3). Notably, the 2024-25 prosecutions included the first use of NRAR's powers to seek a criminal conviction for failure to attend a directed interview, signalling a broadening of its enforcement posture.[148]

[147] Natural Resources Access Regulator, 'Public Register' (*Government of NSW*, 2023) <https://www.nrar.nsw.gov.au/progress-and-outcomes/public-register> accessed 8 October 2025 (note: information on breaches and fines is no longer included in the public register in 2026).
[148] Natural Resources Access Regulator (2025) *Progress Report 2024-25*, NSW Government. Available from <https://www.nrar.nsw.gov.au/progress-and-outcomes/progress-reports> and accessed 26 March 2026.

**Table 3** Prosecutions finalised in 2023-24 and 2024-25[149]

| Year | Water Management Act 2000 | Water Sharing Plan area | Outcome |
|---|---|---|---|
| 2023-24 | s 91G(1) | Lower Murrumbidgee Groundwater | Convicted and fined. Fine not disclosed by NRAR |
| | s 91G(2) (4 counts), s 60C(2) | Lower Murrumbidgee Groundwater | Convicted and fined $156,250 and ordered to pay NRAR costs $60,000 |
| | s 91G(2) | Lower Murrumbidgee Groundwater | Convicted and fined $56,000 and ordered to pay NRAR costs $70,000 |
| | s 340A, s 353H | Macquarie Bogan Unregulated Rivers Water Sources | Convicted and fined $18,900 and ordered to pay NRAR costs $30,000. Publication notice and enforceable undertakings not complied with. Convicted again for failure to comply and fined $20,000 and ordered to pay NRAR costs $5,000 |
| 2024-25 | s 342(1)(a) (four counts), s 343(1) (four counts) | Lower Murray-Darling Unregulated River Water Source | Both company and individual convicted. Company fined $562,500 and manager fined $195,000. Both ordered to pay NRAR costs $95,000 |
| | s 340A, s 353H | Macquarie Bogan Unregulated Rivers Water Sources | Failure to comply with previous orders resulting in additional prosecution. |
| | s 91B(1) (12 counts), s 91(1) (12 counts) | Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources | Both company and individual convicted. Company fined $224,000 and director fined $71,250. The offenders were also ordered to undertake remediation works. |
| | s 340A | NSW Murray and Lower Darling Regulated Water Sources | Farm manager pleaded guilty to failing to comply with a notice issued by NRAR (to attend an interview). The farm manager was fined $1750 and paid NRAR costs of $2000. |

NRAR also has the power to enter into enforceable undertakings instead of prosecuting the offence of water theft.[150] NRAR has entered into 11 of these arrangements, which can include payment for the 'stolen' water (these appear to be at or near market value, although this is not stated); the costs of enforcement action; and restorative works, such as monitoring and

[149] Natural Resources Access Regulator, 'Public Register' (n 147). Note: table is based on data available in October 2025, including details of offences and fines that are no longer available on the website as of March 2026.
[150] See Water Management Act 2000 (NSW) s 336E.

remediation actions, including relational repair. The penalty infringement notices generally serve a similar function, although the requirements/directions are less extensive.

Enforceable undertakings include frequent monitoring and reporting requirements. NRAR exercises strong oversight over these agreements, and some recent prosecutions have involved bringing further charges for failure to comply with these enforceable undertakings.[151] One recent case study that NRAR has made publicly available involved the unlawful take of water by Tahmoor Coal. The enforceable undertaking has required Tahmoor Coal to pay for the 'stolen' water, pay NRAR's enforcement costs, rehabilitate a riparian corridor, and undertake ongoing engagement and consultation with a local Aboriginal organisation and a local community group.[152] This undertaking combines not only restoration that improves the health of the affected waterway (through revegetation works in the riparian zone), but also relational repair with the local community. This relational repair is also (at least attempting to be) decolonial, in specifying particular relationship building and engagement activities with a local Aboriginal organisation.

## 4.3. Responding to water theft in Victoria

Unlike New South Wales, Victoria has not had a major public exposé on water theft. The Victorian Government uses the language of water 'theft',[153] but primarily as a tool for communication. The *Water Act 1989* (Vic) makes it an offence to take and use water without having the required approvals, or in breach of the conditions of those approvals (Table 4). It is also an offence to take water belonging to an Authority (termed a 'wrongful take' of water).[154] Government policy is focused on monitoring compliance and enforcement, which was strengthened by statutory amendments to the *Water Act 1989* (Vic) in 2019, which increased penalties for non-compliance and reportedly 'made it easier to prosecute offences'.[155] Section 33EA, for instance, reverses the burden of proof by stating that

[151] NSW Dept of Natural Resources Access Regulator, 'Prosecutions' (*NSW Natural Resources Access Regulator*, 12 March 2026) <https://www.nrar.nsw.gov.au/about-us/what-we-do/investigation-and-enforcement/prosecutions> accessed 24 March 2026.
[152] Natural Resources Access Regulator, 'Prosecutions' (*NSW Government Natural Resources Access Regulator*, 2025) <https://www.nrar.nsw.gov.au/about-us/what-we-do/investigation-and-enforcement/prosecutions> accessed 8 October 2025.
[153] Department of Energy, Environment and Climate Change (Victoria), 'Taking and Using Water' (*Water and catchments*, 6 September 2023) <https://www.water.vic.gov.au/for-agriculture-and-industry/taking-and-using-water> accessed 24 March 2026.
[154] Water Act 1989 (Vic) s 289.
[155] Department of Energy, Environment and Climate Change (Victoria), 'Non-Urban Water Compliance and Enforcement' (*Water and Catchments*, 28 September 2023) <<https://www.water.vic.gov.au/for-agriculture-and-industry/taking-and-using-water/non-urban-water-compliance-and-enforcement>> accessed 24 March 2026.

'evidence that water has been taken to, diverted to or used on land occupied by the person is evidence that the person took the water and, in the absence of evidence to the contrary, is proof of that fact' (Table 4). Water 'theft' offences may require the demonstration of 'serious damage' or 'economic loss', but there are also strict liability offences for which penalties are smaller and it is only necessary to prove that water was taken without appropriate authorisation.[156] There are also provisions enabling water corporations to issue infringement notices when the amount of water taken is relatively small.[157]

**Table 4** Institutional and legal responses to water theft in Victoria[158]

| **Institutional response** | **Legal outcomes** |
|---|---|
| Offences | • s 33E: knowingly/ recklessly/ strict liability taking water without a water share (water allocation must be authorized under water share)<br>• s 55A: failure to comply with conditions on s 51 licence<br>• s 63: knowingly/ recklessly/ strict liability taking water without authorization in non-declared system (s 51 licence)<br>• ss 64FB, 64FG: offence to take from the wrong place<br>• s 289: wrongful take of water belonging to an Authority |
| Fines | • Individual 10 years in prison or $24,500-$244,000<br>• Corporation $244,000-1.2 million (strict liability lower end)<br>• Penalty infringement notice (s33EB): $2,219 (individual) or $11,095 (corporate), only if taking less than 20%/10 ML[159] |
| Reversal of onus of proof | Evidence of use is assumed to be evidence of take and the occupier is assumed to be responsible unless proven otherwise (s 33EA) |
| Prosecutor | Department of Public Prosecutions (no specific body) |

The Victorian Government has announced a 'zero tolerance' position on non-compliance,[160] but a 2020 review of water corporation activity showed significant variation in both the definition of unauthorised take of water and the volumetric levels that trigger an enforcement action.[161] Since 2019, an average of 1800 investigations have been finalised per year (Table 5), with a major spike in 2021-22 following the review (although investigations have largely returned to average levels since then).[162] As in New South Wales, prosecutions are rare in

[156] See, eg, Water Act 1989 (Vic) s 33E(3).
[157] See, eg, Water Act 1989 (Vic) s 33EB.
[158] All relevant legal provisions Water Act 1989 (Vic).
[159] All relevant legal provisions Water Act 1989 (Vic).
[160] State Government of Victoria (n 3).
[161] Des Pearson, 'Compliance and Enforcement Review: DELWP and Delegated Water Corporations' Responsibilities within the Water Act 1989' (Department of Energy, Environment and Climate Change (Victoria) 2020) <<https://www.water.vic.gov.au/__data/assets/pdf_file/0026/663425/compliance-and-enforcement-review-summary-overview-report.pdf>>.
[162] Water and Catchments, 'Water Compliance Report 2024–25' (*Victorian Department of Environment, Energy and Climate Action*, 2026) <https://www.water.vic.gov.au/for-agriculture-and-industry/taking-and-using-

Victoria, ranging from 6-26 per year (Table 5). Water authorities undertake the investigations, but the final work of prosecution (including the decision on whether to proceed) rests with the Department of Public Prosecutions.

**Table 5** Enforcement actions taken from 2019-2025[163]

| **Enforcement action** | **2019-20** | **2020-21** | **2021-22** | **2022-23** | **2023-24** | **2024-25** |
|---|---|---|---|---|---|---|
| Verbal warning | 26 | 72 | 13 | 28 | 18 | 0 |
| Advisory letter | 1629 | 829 | 157 | 6 | 46 | 92 |
| Warning letter | 554 | 326 | 1455 | 1212 | 1317 | 2248 |
| Notices | 406 | 122 | 474 | 106 | 39 | 64 |
| Lockdown | 15 | 6 | 6 | 1 | 1 | 1 |
| Penalty infringement notices | N/A | N/A | 18 | 19 | 28 | 55 |
| Recommended for prosecution | 26 | 16 | 15 | 6 | 6 | 10 |
| Referred to other agencies | 2 | 5 | 2 | 3 | 7 | 5 |
| **Total** | **2658** | **1376** | **2140** | **1381** | **1504** | **2475** |

In 2024–25, 3,394 alleged breaches were detected, the vast majority relating to unauthorised or wrongful take of water (Table 6).

**Table 6** Potential breaches of the Water Act 1989 (Vic), 2024-25[164]

| **Offence under the Water Act** | **Reported breaches** |
|---|---|
| Unauthorised take of water (water shares) (section 33E) | 2336 |
| Unauthorised take of water (allocation of water) (section 63) | 796 |
| Wrongful take of water (section 289) | 239 |
| Interference with Authority's property (section 288) | 27 |
| Unauthorised works (section 75) | 88 |
| Failure to comply with licence conditions (section 64AF) or breach licence conditions (s55A) | 7 |
| Interference with Authority's property (section 288) and wrongful take of water (section 289) | 12 |
| Wrongful take of water (section 289) and offence to comply with licence conditions (section 64AF) | 2 |
| Unauthorised take of water (allocation of water - section 63) and wrongful take of water (section 289) | 1 |

water/non-urban-water-compliance-and-enforcement/reports/water-compliance-report-2024-2025> accessed 26 March 2026.

[163] Water and Catchments (n 162).

[164] Adapted from data in Water and Catchments (n 162).

| Offence under the Water Act | Reported breaches |
|---|---|
| Interference with authority's property (section 288) and structure over works (section 148) | 2 |
| Other | 39 |

In 2024-25, 2,673 investigations were finalised, resulting in 2,475 enforcement actions (Table 5). The vast majority of these enforcement actions took the form of advice and warnings (verbal and written), with only 55 penalty infringement notices and 10 investigations recommended for prosecution (Table 5). There has been a clear decline in advisory letters since 2019-20, and a corresponding rise in warning letters, which may reflect a shift from educative responses to enforcement responses by water corporations, as well as their new legal powers to issue warning notices from 1 July 2020.

In 2024–25, penalty infringement notices rose to 55, all relating to unlawful take (Table 5). Corporate penalties clustered near the statutory maximum ($11,208 median against a $12,211 cap), while individual penalties were well below it ($198 median against $2,442), a disparity worth noting.[165]

Of six prosecutions finalised in 2024–25, only two resulted in convictions, with fines ranging from $1,000 to $10,000 and costs of $2,000 to $13,000 (Table 7). The low cost awards suggest they cover only court costs borne by the Department of Public Prosecutions, rather than the enforcement costs of the investigating water authority.

**Table 7** Prosecutions finalised in 2024-25[166]

| Water Act 1989 | Water system | Outcome |
|---|---|---|
| s 33E, s 289 | Goulburn System Central Goulburn Irrigation Area | Charges withdrawn. |
| s 151 | Lake Mulwala | No conviction. 12 months good behaviour bond. $750 donation with $2,307.10 costs. |
| s 33E, s 151, s 288, s 289 | Murray | Conviction. Fined $5,000 with $2,700 costs. |
| s 33E, s151, s 288, s 290 | Murray | Conviction. Fined $5,000 with $2,700 costs. |
| s 33E, s151 | Murray | No conviction. Fined $1,000 with $2,000 costs. |
| s 75A(3) | Illegal Bore (Ascot Vale) | Ex-parte hearing. Fined $10,000 with $13,125.40 costs. |

[165] Water and Catchments (n 162).
[166] Water and Catchments (n 162).

Unlike New South Wales, Victorian water corporations do not have the power to enter into enforceable undertakings in response to water theft. They can take direct enforcement action, including to reduce, restrict or discontinue water supply,[167] and can lock water pumps or water wheels to prevent unauthorised access. In 2024-25, there was one instance of an enforcement action involving cutting off supply (Table 5).

Taken together, these case studies illustrate the tangible legal and institutional consequences of the rhetorical shift from 'unlawful take' to 'water theft'. In New South Wales, it was the framing of water misuse as 'theft', amplified by the 2017 media investigation, that created the political conditions for new criminal offences, the establishment of a dedicated enforcement body, and the progressive escalation of penalties. This framing also facilitated the reversal of the onus of proof, a measure more readily justified when the conduct in question is characterised as theft rather than regulatory non-compliance. In Victoria, the same language has signalled a 'zero tolerance' posture, even where the institutional response has remained more modest. Yet the consequences of the theft framing extend beyond the punitive. As we argue below, in New South Wales, the very severity of the enabled carceral response has opened space for more restorative measures, including enforceable undertakings incorporating environmental repair and relational engagement. Specifically, we hypothesise that the enforcement and acceptance of these restorative measures was strengthened by the shadow of significant criminal sanctions.

## 5. INSIGHTS FROM TWO DIFFERENT WATER THEFT RESPONSES

The legal and institutional responses to water theft in New South Wales and Victoria rely on investigations and warning notices for the overwhelming majority of cases (see Tables 2 and 5), rather than more punitive carceral responses. The data demonstrates that these carceral tools are employed as a last resort, a strategy that focuses on behavioural adjustment and keeps the costs low for the enforcement agencies. It is also worth noting that using this stepped approach, in which educative and warning responses are provided in advance of stronger enforcement action, can help provide evidence of intent that can be used in court to support findings of guilt and higher fines at sentencing.[168]

[167] Water Act 1989 (Vic) s 141.
[168] See, eg, *Grant Barnes, Chief Regulatory Officer, Natural Resources Access Regulator v O'Haire [2020] NSWLEC 158*.

Beyond this initial similarity, the two jurisdictions demonstrate quite different approaches. Victoria has finalised more investigations on average since 2019 than New South Wales (1800 compared to 1000), and the numbers of prosecutions are also marginally higher, despite having significantly fewer water access entitlements.[169] Victoria's water authorities appear to be active in undertaking investigations and issuing educative and enforcement responses (including convictions) to water users who have taken water unlawfully, without needing to resort to large fines. On the face of it, this appears to indicate that a strong carceral response involving criminal convictions and large financial penalties is not necessary to support a culture of compliance.

In New South Wales, on the other hand, fines are much higher and successful prosecutions are much more likely to include significant financial penalties, convictions, and significant costs awards to NRAR. Enforcement actions in New South Wales have not shown a sustained decline over time, which suggests higher penalties are not necessarily having a strongly deterrent effect on water users (although we note that further research is required to understand the effects of water enforcement actions on water users' attitudes). Indeed, the passage of new legislation in late 2025 to double the maximum fines indicates that the New South Wales Government believes that further punitive deterrence is required.[170] This attitude may reflect the particular history of New South Wales, which was the jurisdiction in which water theft and corruption issues became national headlines in 2017, prompting an immediate and increasingly harsh carceral response from the state government.

Beyond these higher penalties, however, there is evidence of a more complex legal and institutional response emerging from New South Wales. Unlike Victoria, New South Wales has a dedicated compliance and enforcement agency (NRAR), with deep expertise in the complicated, technocratic field of water law. Unlike the Victorian Department of Public Prosecutions, NRAR has clear incentives to ensure that costs awards include as much of the enforcement costs as possible (in Victoria these appear to be borne by the water authorities, and ultimately by all their customers), and NRAR staff are much more likely to be aware of the impacts of water theft to other users and the environment. This awareness is also likely to be shared by the specialist judges of the New South Wales Land and Environment Court,[171]

[169] Victoria has just over 26,000 water access entitlements (data obtained from the Victorian Water Register, 24 February 2026), whereas NSW has approximately 38,000.
[170] Water Management Legislation Amendment (Stronger Enforcement and Penalties) Act 2025 (NSW).
[171] Justice Nicola Pain has presented on this issue at conferences, see Nicola Pain, 'Administering Water Policy in the Eastern States of Australia – Administrative and Other Challenges' (Paper presented at Australian Institute for Administrative Law National Administrative Law Conference, Canberra, ACT, 18-19 July 2019) 1,

and the 2025 reforms included clearer consideration of impacts on Indigenous Peoples as well as the environment when imposing penalties.[172] It is therefore possible that the stronger carceral response in New South Wales reflects greater understanding of both the incentives for and consequences of water theft.

New South Wales has also employed a novel enforcement response by using enforceable undertakings. Victoria is not using enforceable undertakings in response to water theft, although it does use them in response to other environmental harms,[173] so it is plausible that Victoria could apply this option in future. Enforceable undertakings are complex agreements that require ongoing oversight, but they can deliver both a financial penalty (such as the market value of the water that was unlawfully taken, as well as the costs of any other required activities) and a restorative response to begin to repair the harm caused by water theft. NRAR has entered into 11 enforceable undertakings, which are accessible via its Public Register database,[174] which increases transparency (a key element of success for enforceable undertakings),[175] and the scale of enforceable undertakings entered into by NRAR varies significantly. In one example, Boggabri Coal illegally impounded surface water on its mining site, and was required to install new water meters, improve water monitoring and reporting, compensate NRAR for their costs, pay $54,000 'to compensate for surface water taken unlawfully' and contribute $10,000 to a local community water ponding project.[176] This is a relatively small cost when compared to that of Illawarra Coal, who was not required to compensate for the value of the water, but did contribute close to $2.9 million to a community project to restore the health of waterways and wetlands in the region.[177]

The three most recent enforceable undertakings on the NRAR website (entered into in 2023) all include the requirement to engage and consult with local community groups and local

cited in Pallas, 'Sentencing Offenders for Unlawfully Taking Water in New South Wales' (2021) 40 University of Tasmania Law Review 69. We also note that even so, they have still been seen as imposing inadequate fines, see e.g. Patrick Bell, '"Slap on the Wrist": Farmers Fume as Whitehaven Coal Fined $200,000 for Taking Water' *ABC News* (New England, Australia, 25 November 2021) <https://www.abc.net.au/news/2021-11-25/whitehaven-coal-fined-200-thousand-dollars-for-taking-water/100647354> accessed 24 March 2026.

[172] Water Management Act 2000 (NSW), s364A (1) (b1, b2, c).

[173] Forsyth and Tepper (n 64) 389.

[174] Natural Resources Access Regulator, 'Public Register' (*NSW Government Natural Resources Access Regulator*, 2025) <https://www.nrar.nsw.gov.au/progress-and-outcomes/public-register> accessed 26 March 2026.

[175] Forsyth and Tepper (n 64) 397.

[176] NSW Dept of Natural Resources Access Regulator, 'Boggabri Coal Operations Pty Ltd' (*NSW Natural Resources Access Regulator*, 28 October 2025) <https://www.nrar.nsw.gov.au/about-us/compliance/regulatory-responses/enforceable-undertakings/boggabri-coal-operations-pty-ltd> accessed 24 March 2026.

[177] NSW Dept of Natural Resources Access Regulator, 'Illawarra Coal Holdings Pty Ltd' (*NSW Natural Resources Access Regulator*, 28 October 2025) <https://www.nrar.nsw.gov.au/about-us/compliance/regulatory-responses/enforceable-undertakings/illawarra-coal-holdings-dendrobium-mine> accessed 24 March 2026.

Indigenous organisations.[178] This is a significant inclusion, as it acknowledges not only the need for physical restoration of ecosystems, but also relational repair with local communities. In this way, we consider these enforceable undertakings may assist in not only redressing the harms of water theft but also beginning to restore positive relationality to water resource management more broadly.

More attention should be paid to these creative, restorative approaches, as these enforceable undertakings offer hopeful pathways towards more restorative, relational futures. This is an emerging global trend in water law,[179] and enforceable undertakings have the potential to create opportunities for the relational transformation of water laws. Ultimately, changes will also need to be made to the foundations of environmental law (some of which are already happening)[180] but enforceable undertakings such as these can make positive change within the current system and provide a working model to support the necessary transition.

We hypothesise that New South Wales' more creative response to water theft is linked firstly, to a strong, independent water compliance and enforcement agency (as discussed above); and secondly, to more severe carceral responses. It is to this second arm of the hypothesis that we now turn. When water users are confronted with the possibility of very large fines, this creates space for the enforceable undertakings to be more meaningful. Alleged perpetrators know that should they choose not to agree to an enforceable undertaking, they will potentially face fines of up to almost $10 million (for corporations). This strong carceral response thus creates an equally strong incentive to agree to an enforceable undertaking that provides both a punitive financial outcome and some restorative justice for ecosystems and communities.

This hypothesis is worthy of further exploration, because it indicates a possible relationship between carceral and restorative logics, at least as a transitionary approach. In the context of an existing water market, where water has a high financial value, there are strong financial incentives to take water unlawfully. In such circumstances, a powerful punitive response from the state may be necessary to enable the implementation of meaningful restorative justice. In

[178] Natural Resources Access Regulator, 'Public Register' (n 174).
[179] Erin O'Donnell, Cristy Clark and Rachel Killean, 'Rights and Relationality: A Review of the Role of Law in the Human/Water Relationship' (2024) 17 Water Alternatives 207; Elizabeth Macpherson, 'Can Western Water Law Become More "Relational"? A Survey of Comparative Laws Affecting Water across Australasia and the Americas' [2022] Journal of the Royal Society of New Zealand 1 <https://doi.org/10.1080/03036758.2022.2143383>.
[180] Erin O'Donnell, 'Repairing Our Relationship with Rivers: Water Law and Legal Personhood' in Rhett Larson and Vanessa Casado Pérez (eds), *Research Agenda for Water Law* (Edward Elgar 2023).

this case, the carceral response operates as a bridge between the world we currently occupy, and a more just, relational future we hope to build.

Nonetheless, we offer several notes of caution. First, this hypothesis must be tested with in-depth qualitative research, to understand the role that enforceable undertakings are playing in both deterrence and restoration and relational repair. Second, if the carceral response can operate as a pathway to restorative justice by creating space for more relational outcomes, then carceral logics cannot be allowed to define the narrative. The punitive carceral response must become the means rather than the end, and significant investment in both (1) increasing the numbers of enforceable undertakings and (2) actively creating narratives of relational repair rather than punishment will be essential.

## 6. CONCLUSION

Our current approach to water governance is producing undesirable outcomes, including disastrous levels of over-extraction in the Murray-Darling Basin,[181] with serious implications for the wellbeing of river systems and the communities that rely on them. Water theft is contributing to this unsustainable over-extraction, but it is also facilitated by the current market-based system that has incentivised short-term exploitation over long-term custodianship. While increased criminal penalties may operate as a deterrent for some forms of water theft, they cannot address these structural drivers of managed decline. For this, we need to transform our approach to water governance, and this will require viable pathways to transformation.

This paper argues that such a transformation will require more creative and reparative responses to water theft, and that the new restorative justice approaches introduced in New South Wales may represent a positive step in this direction. However, as our analysis demonstrates, the choice to frame unlawful water use as 'theft' is consequential: it invites carceral responses, constructs water as property, and can obscure both systemic failures and the colonial foundations of existing water governance. These dynamics must be kept in view even as the theft framing creates openings for both stronger enforcement and more effective restorative responses. In contrast to analyses that frame such approaches as oppositional alternatives to criminal sanctions, we hypothesise that the current efficacy of restorative

[181] R Quentin Grafton and others, 'Resilience to Hydrological Droughts in the Northern Murray-Darling Basin, Australia' (2022) 380 Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences 20210296 <https://doi.org/10.1098/rsta.2021.0296>.

justice approaches may be bolstered by a backdrop of criminal and civil sanctions. If correct, this would mean that punitive and restorative justice measures may be more complementary than contradictory, at least in the short term.

Our comparison of New South Wales and Victoria further suggests that institutional design matters: the establishment of a dedicated compliance and enforcement agency with specialist expertise appears to facilitate not only more effective prosecution, but also more creative responses such as enforceable undertakings that incorporate relational repair with local and Indigenous communities. This has implications for wider debates around both the challenges and the possibilities of 'carceral creep' in environmental governance, including the risks and value of introducing the crime of ecocide, and merits further empirical exploration. Testing this hypothesis will require in-depth qualitative research with water users, enforcement officers, and affected communities in both jurisdictions, examining how the availability of severe criminal sanctions shapes decisions to enter into enforceable undertakings and whether those undertakings produce meaningful changes in compliance behaviour, environmental outcomes, and community relationships over time. Comparative analysis of jurisdictions that have adopted enforceable undertakings with and without a backdrop of significant criminal penalties, combined with longitudinal tracking of ecological and relational outcomes, would help to isolate the role of carceral severity in enabling restorative measures and to assess whether these instruments can transcend the market-based and colonial frameworks within which they currently operate. Such research would contribute not only to debates about 'carceral creep' in water governance, but to the broader question of whether law can facilitate more just and relational forms of environmental governance.