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ENVIRONMENTAL HISTORIANS, POLICY, AND GOVERNANCE

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Preparing for the call?

Consider the following two episodes of experts and policymaking from recent Australian history:

In July 2021, the Australian historian Warwick Anderson received an email from the Australian army general who was coordinating the nation's Covid-19 vaccination program. The general asked Anderson, a prominent historian of medicine and the environment, on the "lessons of history" and "what might be learned from earlier efforts to control epidemic disease". Anderson prepared for a short phone call with the general, brushing up on various historic vaccination and public health campaigns, noting how nearly all such efforts required "patient and painstaking engagement with communities" and "infinite sensitivity, sympathy and flexibility". Knowing he was speaking to a military man, Anderson framed this as a "practice of pacification and counterinsurgency". In the end, Anderson spoke with the general for more than 30 minutes, although Anderson "got the impression [he] was mostly confirming what [the general] already knew or had heard before" (Anderson 2021).

In December 2021, the Australia Institute, a prominent independent think tank, released a report questioning claims made by Santos, a major Australian natural gas producer, about the potential of carbon capture and storage at one of its gas fields. The Australia Institute drew attention to Santos's activities within the context of an Australian government policy around emissions reductions – policies which did nothing to reduce emissions. Using Australia's freedom of information laws, the Institute sought access to documents within the Department of Industry to see how the department responded to the report. A member of the climate change policy section of the department wrote: "Crickey [*sic*] – that TAI report is 21 pages long. I'll stick with the summary thanks 😊".[1]

In these two moments, we might either draw hope or feed our cynicism around policy-making today. We live in hope that some people with power wish to draw on expertise and evidence, including historical expertise and evidence, to shape important policies and to improve people's lives. We also live with the knowledge that bureaucracies and policymaking capacities in many countries have been utterly politicised and hollowed out by neoliberal cost-cutting. Scientists working in government and industry routinely have their scientific

results or publications suppressed (Driscoll et al. 2021). We worry that no amount of evidence, however compelling, will sway policy- and decision-makers. We worry that even a mere 20-page, evidence-rich document will be blithely cast aside.

This chapter explores how environmental historians might interact with, and have interacted with, policymaking and the broader suite of environmental governance that is now in place at all scales, from the local, through the regional and national, to the international and global. At this time of planetary challenges, interactions with policymaking might seem a tinkering approach to environmental problems, both local and global. "Can environmental history save the world?" asked a group of Australian environmental historians in 2008 (Brown et al. 2008). That was a mostly tongue-in-cheek question, and the answers each of them gave explored locally relevant examples in which historians had made important if modest contributions. Other noteworthy environmental scholars have rather more radical answers to questions of world saving – for example, blowing up pipelines (Malm 2021).

Environmental historians should not wait by the phone. If they want to contribute to policymaking, they need both conceptual frameworks and rich case studies as examples to guide their actions. This chapter offers some frameworks and examples for the environmental historian's toolbox. Drawing on policy and political science literatures, it examines the nature of environmental policy and governance. The chapter also looks to the larger literature and experiences of "history and policy" as an area of practice and concern. For environmental historians specifically, we consider a range of important policy issues around data and information, rights and justice, deliberation and community engagement, and communities of practice. All this, we hope, might help an environmental historian who wants to take their research to policymakers.

The scope of "policy"

"We need to protect this river" and "We need to eliminate greenhouse gas emissions" are fundamentally sound and important goals, but they don't quite cut it as "policy". If a historian wants to effect change in governance or regulation, we must start by asking what policy is and what it means for a historian to participate in policymaking; when, where, and with whom can historians influence policy? There is a many-decades-old body of critical policy scholarship from which we can draw to assist how we approach the "policy interface". There is an especially rich literature on the "science-policy interface" – which broadly emphasises the limits of the "linear model" of advice, often critiques of the "interface" concept itself, and covers all areas of public policy from health and social policy to environmental and sustainability policies (Bednarek et al. 2018; Palmer et al. 2018; Pielke 2007; Wesselink et al. 2013).

What is policy? In other words, how should environmental historians think about policy? Stephen Dovers and Karen Hussey define policies as "positions taken and communicated by governments – 'avowals of intent' that recognise a problem and in general terms state what will be done about it. Policies are produced through multi-component and variable *policy processes* that combine government and non-government players". A policy- or decision-maker is someone "with legal competence and responsibility in the relevant jurisdiction to do things" (Dovers and Hussey 2013: 14–15, emphasis in original). Policies are enacted with instruments, tools to achieve desired outcomes. Processes are central: problems are framed and recognised; options for solutions are developed and explored; solutions are chosen; decisions are made and implemented; and outcomes are monitored and

evaluated (broadly drawn from Dovers and Hussey 2013; see also Cairney 2020; Howlett et al. 2020). Historians thus face a variegated terrain of actors and processes when approaching policymaking.

While governments are still central to policymaking, the rise of "governance" and a wider array of actors over the past three or four decades, has enlarged and added a level of complexity to policy processes. There are many sites at which historians might intervene to effect change. "Governance" – often seen as a combined result of neoliberalism, economic globalisation, and the influence of international institutions like the OECD or World Bank – includes not only governments, but also communities, businesses, and non-governmental organisations, and is shaped by political, market, and community concerns embodied in a variety of institutions and ideas across scales (Lemos and Agrawal 2006; Newell et al. 2012). A major example in global environmental governance would include the International Union for the Conservation of Nature. Its very structure combines states with non-state actors across every scale, and its expert commissions, committees, and communities are rich sites of policy development, which can have significant influence across the world (Schleper 2019). In another example, companies, both local and multinational, value legitimacy and social license for their work – primarily as a way of building their wealth. The rise of environmental, social, and corporate governance (ESG) has allowed a range of policy actors to influence business activities, thus potentially achieving certain environmental outcomes. Certification schemes – such as the Marine Stewardship Council or Forest Stewardship Council – have also emerged in recent decades at the intersection of non-governmental action and governmental policy as ways for corporations to sell products and consumers to buy products with certain bits of information (Abrams et al. 2018; Auld 2014). These sites and nodes of governance, sometimes falling outside government processes, are all potential sites for historians to introduce historical expertise and evidence to achieve just and sustainable outcomes for peoples and environments.

Historians and policy

Before further considering the case of environmental historians, it is worth understanding some of the contours and contexts of the contemporary push for historians to be active within policymaking. In many countries, some historians have pushed for the standing and presence of historical knowledge in policy debates and governance frameworks. While many historians are of course concerned to make substantial contributions to, and improvements in, public policy, there is nevertheless an inescapable element of the bureaucratisation of research and universities in many countries to contend with and to keep critically in mind. Historians seeking funding from public bodies are enjoined to predict and aim for "impact pathways" in which their new knowledge – however esoteric, pure, or distant from pressing concerns – is made to connect with some aspect of public policy or community need.

While there are examples of historians engaging in policy development and government from earlier points in history (for some British examples, see Green 2016), perhaps the earliest influential exploration of "history and policy" arose under political scientist Richard Neustadt and historian Ernest May at Harvard University. In the 1970s they began teaching a course on the "uses of history" to their students, many of whom had jobs in government or the military. This led to their 1986 book *Thinking in Time: The Uses of History for Decision-Makers*. Their aim was to create "'mini-' or 'small-m' methods" for use by decision makers, a "checklist of questions to be asked early instead of late", either during crises or in

policy development (Neustadt and May 1986: xvi). Several assumptions guided their work, two of which are worth mentioning here. Neustadt and May insisted that government or policy actors "actually used history in their decisions … whether they knew any or not" (Neustadt and May 1986: xii). One task of the historian was to offer good histories. Another assumption that guided their work was that "Marginal improvement in [policy or decision-making] performance was worth seeking" (Neustadt and May 1986: xvii; see also Cox 2013: 136–7). Neustadt and May's conceptual framework and mini-methods remain valuable.

More recent critical reflection and on-the-ground practice have further elaborated the promises and challenges of "history and policy". Important work has emerged from the United Kingdom, where the History & Policy organisation and web platform is well-advanced in its work (Delap et al. 2014). Historians who have led or been involved in these developments have reflected on their experiences to suggest ways forward for others, including in the following areas.

Following Neustadt and May, it remains crucial to recognise that politicians and policy makers often invoke and deploy history "in an ad hoc way, mostly without the involvement of historians" (Berridge 2008: 323). This opens a space, as Alix Green has suggested, for emphasising history as a disciplined analytical labour that everyone can undertake rather than merely as a source of facts; processes might be more influential than content. Historians should thus de-emphasise "the tangible products of historical research" and consider how simple participation in policy processes, including conversations with influential actors, can be useful and meaningful (Green 2016: 115).

If encouraging historical thinking is an important aim, which part of policymaking structures and processes should that thinking be encouraged in? As Dovers and Hussey outline – as detailed in the previous section – there is a complex terrain of actors and processes. Not all actors and processes can be simultaneously engaged with and successfully influenced. Virginia Berridge's experience strongly suggested that historians had to be aware of existing alliances and networks of actors which they might connect into (Berridge 2008, 2018). One way of assessing which alliance, network, or process might be worth engaging with is to remember, as Berridge puts it, that "timing is key" (Berridge 2018: 377). Not all moments in policy development are equally amenable to outside influence or new data or conceptual input. Berridge's *in situ* work showed that "Particular points in the policy-making cycle were also more 'open' [to the insertion of history] than others" (Berridge 2008: 316). In her policy-engaged work on youth crime and child protection, the historian Pamela Cox has similarly emphasised the necessity of knowing the best moments to intervene (Cox 2013).

As the literature makes clear, these potential interventions and actions are labour intensive and time consuming. Networks and alliances must be recognised and joined, and participation maintained to build trust and understanding; sometimes networks and alliances have to be built. Contributions and changes in policy may only ultimately be marginal or modest.

Environmental historians and policy

Across the wide, diverse, and now enormous literature that constitutes environmental history, there are very few explicit or programmatic considerations of "environmental historians and policy". Certainly, there have been semi-regular reflections on how environmental historians have engaged with broader publics. And there have been moments in which prominent voices have argued that perhaps the field has lost its earlier impulses for advocacy and

public orientation as it has professionalised and grown within the academy. John McNeill, in a highly-cited 2003 overview of the field, argued that "political engagement seems to have declined sharply in the U.S. and Europe, while still surviving in India and Latin America", although he couldn't offer an argument as to why (McNeill 2003: 34). In more recent reflections, he suggests that he has probably had greater influence on solving environmental problems through the thousands of students he has taught than in the few engagements with policymaking into which he was drawn (McNeill 2017). To be sure, public environmental history has a rich body of practice and writing, especially in the United States, where historians often work in government agencies (Madison 2004; Shull and Pitcaithley 2004). A general impression, though, of the contents of one of the field's major journals, *Environmental History*, suggests that explicit explorations and reflections of environmental historians' participation in policy development are quite rare. Interdisciplinarity is more invoked than policy engagement.

Let us consider the reflections of three environmental historians in relation to policy:

In 2000, the Australian environmental scholar Stephen Dovers offered substantial thoughts on how environmental history could contribute to policymaking. He suggested "three categories of relevance" for environmental history: "general historical perspectives, human and ecological baselines, and policy and institutional lessons". While general historical perspectives are useful, Dovers suggests, "there are unlikely to be operational policy suggestions arising"; he does, however, note that history's synthesising and integrative approaches can be helpful for a difficult policy area like sustainability. On establishing baselines, Dovers feels that the potential contribution of historians is self-evident and important. Knowledge of previous states is essential, but he also cautions that this baseline work is fundamentally interdisciplinary (Dovers 2000a: 137–9) – and indeed, in the case of oyster reef restoration in South Australia, the establishing of baselines by historically minded marine scientists doing historical research suggests the transformative effects of actually establishing baselines, both for engaging policymakers and establishing legitimacy with the public (McAfee et al. 2020). On policy and institutional lessons, he also sees a specific instance of how historians can help: keeping and disseminating the detailed knowledge of previous actions, and "being reminded of what we have forgotten". On this latter point, Dovers appears profoundly pessimistic, since he considered that (at least in late 1990s Australia, although arguably in most contexts), "'policy amnesia' is endemic" (Dovers 2000a: 139–40). Like many other historians working in the policy field, Dovers cautions that, in terms of policymaking, historians and policymakers alike, "should not expect too much from history" (Dovers 2000b: 6).

In Britain, Paul Warde has also articulated environmental historians' potential contributions. He suggests that historicising policy processes and central concepts in environmental policy is critical (Warde 2015). With colleagues, Warde has suggested three main forms of historians' policy-relevant evidence: in providing analogues (both true and false analogies); providing direct evidence of past circumstances (which includes baselines); and providing a historical mode of thought, which is integrative and synthesising (Delap et al. 2014: 100) – broadly reaffirming Dovers's points. On contributing evidence, for him, the work of historians – such as reconstructing past environments – will always be "very partial, and becomes far more convincing when allied with sources of information drawn on by scientists … or an understanding of the biological and ecological functioning". But, he adds, historians can help to strengthen the data collected by scientists by using their traditional historical methods (Warde 2015: 150; see also Delap et al. 2014).

Finally, the Canadian historian Dean Bavington has taken a much more critical approach. While he appreciates the potential contributions historians might make to policymaking, he strikes a wary (even weary) note about the instrumentalisation of knowledge, especially within universities. The task of the historian in relation to policy processes for Bavington is more fundamentally about "reimagining eco-social relationships and the industrial mindset that produced the Anthropocene" (Bavington 2011: 4). Bavington wants historians to help with a move away from "control-oriented" policy to a policy that helps communities deal with uncertainty and complexity. Like others, Bavington also demands that we historians critique the violence of abstractions and conceptualisations of nature as "resource" (Bavington 2011).

Many other disciplines concerned with good, ecologically sound, and sustainable policymaking – like conservation biology and environmental management – have also developed their own literatures around "policy engagement". On-the-ground practice in feeding scientifically sound and community-relevant evidence and knowledge into environmental and conservation decision-making is globalised, if uneven, and scholarship and literature analysing and reflecting on those practices is extensive and always growing. Environmental historians seriously considering engaging with policy processes should build awareness of these practices and literatures. The general tendency of this contemporary literature is to recognise that good environmental and conservation decision-making must be built on diverse knowledges and through engagement with varied stakeholders, at all stages of policymaking. Knowledge and evidence should be co-produced with stakeholders and, as David Rose and colleagues summarise, "common principles of effective engagement include trust, reciprocity, respect, transparency, clear benefits to participants, co-learning and identifying all necessary decision-makers". Furthermore, "It cannot be assumed that good practice for working with one type of decision-maker is transferable to working with another" (Rose et al. 2020: 164). But persistence, too, is crucial. From their work on oyster reef restoration in South Australia, Dominic McAfee and other historically minded marine scientists found that "persistent socialization" and normalising of the historical baselines and narratives among government officials and the public was also crucial to leading to policy action, in the form of oyster reef restoration (McAfee et al. 2020).

Data and information, rights and justice

Soon after Donald Trump was inaugurated as president of the United States, climate data seemed to be disappearing from US government websites. If the data itself was not likely to have been destroyed, removing easy public access was taken as a symbol of Trump's hatred of environmental protections. The Environmental Protection Agency (EPA), one of the oldest such agencies in the world, seemed also to be under attack, with Trump appointing the climate-denier and fossil fuel champion Scott Pruitt to be its head.

At such a moment of full-throated political attack on the institutions of environmental protection, what is a historian to do? The policy processes described earlier – such as framing and recognising problems or exploring and developing solutions – can work only if institutions are legitimately constituted and operated, and with quality and accessible data. One pre-emptive response to Trump's attack on data and the EPA was the Environmental Data and Governance Initiative (EDGI), formed in November 2016 after his election. Historians joined other social and physical scientists to keep a keen eye on the US government's websites, to ensure that data sets remained accessible (Vera et al. 2018). Trump's

attack also underscored that, even in earlier times, environmental data was widely dispersed across the government and not especially accessible. In the early Trump era, a range of data activism activities emerged to help preserve environmental data and make it more accessible, including using vital web resources like the Wayback Machine of the Internet Archive.[2]

As EDGI has developed, historians and historical thinking have increasingly been added to its work. An early, significant piece of EDGI work that was informed by historians' sensibilities was its contemporaneous archiving and public historical work with EPA employees at the moment of Trump's attacks on the agency. This involved confidential oral histories with long-term EPA employees (Sellers et al. 2017; Sullivan et al. 2021). Such work, which seeks to actively keep a variety of records and sources on central environmental policy institutions, is an excellent example of a range of ways that environmental historians can help with environmental policy. Not only is it embodied in deeply researched, evidence-based reports, but also in stand-alone, accessible websites such as "A People's EPA".[3] Subsequent developments include the Environmental Historians Action Collaborative, a group within EDGI, many of whose original members had participated in writing an amicus brief for a major youth climate case presented to the US Supreme Court.[4]

The protection of specific data sets or retaining certain bits of information ties into a broader development around environmental rights in recent decades. Historians' engagements with policy processes should not only be targeted to achieve specific policies around ecosystems or sustainability, but should also broadly support principles and processes. Data and information are essential for all peoples to participate in decisions affecting them and their environments. Principle 10 of the Rio Declaration on Environment and Development states that "Environmental issues are best handled with the participation of all concerned citizens" and that nations should ensure that individuals "shall have appropriate access to information concerning the environment that is held by public authorities … and the opportunity to participate in decision-making processes". States should ensure that information is "widely available".[5]

This broad principle on access to data and information, which nearly all states are signatories to, has been given additional legal teeth in subsequent regional agreements. In Europe, the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the Aarhus Convention) was signed by 47 countries within the UN's Economic Commission for Europe in 1998 and came into force in 2001. This treaty pushed forward international environmental law by instituting obligations of states towards individuals in any state; it pushed forward a vision of environmental democracy (Barritt 2020). In 2018, the members of the UN Economic Commission for Latin America and the Caribbean signed the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean (the Escazú Agreement) that, although it has differences to the Aarhus Convention, similarly pushes towards forms of environmental democracy and rights to healthy environments (Stec and Jendrośka 2019).

Helping deliberation

With so many pressing and obvious environmental problems, encouraging more deliberation and discussion among peoples and institutions might seem like dangerous delay. However, as much recent literature and practice in public policy suggests, processes are

essential to policy success and outcomes, especially in the problem and solution-framing phases of policymaking. This is both as a matter of principle – democratic decision-making that is open to peoples at relevant scales is crucial – and as a matter of efficacy and legitimacy.

A noteworthy approach here is "co-design". In recent decades, a concern with ensuring good policy has led policymakers and policy scholars to embrace processes that more actively include the people who might be affected by policies. In one definition, "co-design … [is] a design-led process, involving creative and participatory principles and tools to engage different kinds of people and knowledge in public problem solving". The process holds that "lived experience" is a crucial domain of expertise. It uses "practical tools … to access, generate, and test experiences and ideas", including a range of creative and other approaches which allow people – not just individually, but in a group through deliberative encounters – to tell their stories and to make and test potential solutions (Blomkamp 2018: 731–3).

Historians can be part of this deliberative or co-design process. In February 2003, Marsha Weisiger, then a tenure-track assistant professor at New Mexico State University, wanted to contribute to the question of Mexican wolf reintroductions in the American southwest. She thought that reasoned, open, and respectful discussion among wolf experts, ranchers, environmental activists, interested members of the public, and historians, could bring nuance and light into the debate around the wolf's apparent conflict with livestock, which was being grazed on federal public lands. The symposium was titled "Leopold Forum: El Lobo" as a tribute (and wry, karmic backhand) to the great American conservationist Aldo Leopold, whose "land ethic" has been so influential yet whose early career contributed to the extirpation of wolves in the southwest. Weisiger believed that wolves and ranchers somehow had to inhabit the same landscape, "however difficult that proposition might be". Also, as a beginning proposition, she thought that "science does not offer unambiguous answers to environmental questions", and thus, adding historical, social, and political nuance and complexity to the public discussion might assist in the important task of reintroducing these predators into the southwest rangeland ecosystem (Weisiger 2004: 125–6).

Weisiger took on the enormous task of convening a major two-day symposium that would hopefully foster interactions between conflicting sides of a tense policy issue. Here, the environmental historian was acting as a mediator to allow multiple competing public policy positions to be enacted, ranging from a species reintroduction plan under the US Endangered Species Act, as well as the continued commercial use of public lands to raise beef for sale and consumption. Weisiger asks: "Did adding history into the discussion make any difference?" Her frank answer was "It's hard to say". Certainly, it did not bridge the immense divide between the pro- and anti-wolf positions. But what it did reveal to Weisiger was the kinds of history that were important in these policy discussions. Ironically, it was not the deeply researched and sophisticated histories of her and her academic colleagues that seemed to be most important. It was, rather, following Carl Becker's famous insight, that "everyman" (and every person) was their own historian (Weisiger 2004: 143). That in the deliberative process around wolf policy, the participants found it validating and important to talk of their own histories. A great validation indeed for public history, but perhaps deflating for scholars.

Arranging this deliberation was not easy. As Weisiger says, "Organizing public conversations about contentious environmental issues is not for the faint-hearted" (Weisiger 2004: 144), taking over two years, which included grant writing and the whole coordinating effort, on top of Weisiger's regular teaching commitments. The grants and funding were required – to

the tune of over US$32,000 – to ensure a free event that included a wide range of speakers (Weisiger 2004: 133). Importantly, Weisiger was also conscious about her own limits and those of history. Anticipating conflict, Weisiger drew on her experience and contacts in a conflict mediation course she had taken as a fellow of the Environmental Leadership Program, to plan a "private breakfast" following the main public program, which a skilled conflict negotiator chaired and facilitated (Weisiger 2004: 135). As with many cases of public and policy engagement, Weisiger's openness and ethical dealings with people who held opposing opinions and positions to hers were also important to the process; it embodied what a great deal of positive examples from conservation biology and management say is essential about effective engagement with communities (Rose et al. 2020).

Communities of practice for environmental resilience

Building societal resilience in relation to Earth's natural processes has been a central task of modern states for centuries. In the face of climate change, which increases the intensity and frequency of "natural" disasters, building that resilience is as crucial as ever. Although pre-dominantly considered the purview of technical experts, in recent decades, some historians have engaged with these resilience policy areas and tried to inject historical evidence and historical thinking into the mix (Lakhani and de Smalen 2018). One notable area has been around fire. Stephen Pyne's historical scholarship has investigated fire globally, but he has also engaged directly with wildfire management in the United States (Pyne 2009). In Australia, too, historians like Tom Griffiths and Daniel May have, in parts of their research, directly addressed the place of history in fire policies (Griffiths 2009; May 2020).

Flooding is an environmental event with a long, often disastrous, history, but which also requires ongoing policy adaptations and considerations. Historian Margaret Cook reflects on her experiences as part of a "community of practice" trying to shape flood and water policy in the Australian state of Queensland, especially Brisbane, its largest city and capital:

Following publication of *A River with a City Problem: A History of Brisbane River Floods* (Cook 2019), I deliberately sought opportunities to work with flood policy makers. A Queensland-based group calling themselves the Flood Community of Practice invited me to speak on my new book soon after its release, following which I fully joined in the Community's work. It was established by Dr Piet Filet in 2014 as a cross-disciplinary network of 550 practitioners and scholars from the private, government, university and community sectors involved in various aspects of flood risk management. Communities of practice have existed for 30 years as a way of sharing knowledge and lived practice as means of collaborative learning about a "real-life problem" (Pyrko et al. 2017; Wenger 2010). While Brisbane-based, it has national and international links (particularly with the Netherlands and Britain) and holds regular, interactive, face-to-face, and online workshops to share and build knowledge among members, aiming to be a voice for proactive and holistic approaches to developing flood resilience. Most members are engineers, hydrologists, scientists, and architects who actively work in disaster management. Although I am the only historian in their cohort, Piet Filet maintains that my "research has proved to be a fresh and alternative way to look at past management choices".[6] My involvement is valued by members who have told me that I bring new knowledge and historical depth to members' discussions and work practices that informs contemporary planning and flood responses.

In the field of flood management, there are rich opportunities to work with town plan-ners, engineers, and architects – those who determine policies that shape our cities.

Each discipline has its own worldview, a way of framing or analysing problems, and the discipline of history can offer new perspectives on old problems. Through archival research and oral histories, historians uncover hydrological and socio-political complexities, reveal the conflicting narratives and disparate voices, and add the human and non-human dimensions to an event. Scientific and policy documents can be selective in fact, or, as Ian Townsend's research on the 1889 Cyclone Mahina in north Queensland uncovered, can recycle scientific "facts" based on erroneous accounts of the events that question the validity of the regions' cyclone modelling (Townsend 2020). Similarly, Tom Griffiths argues that Victoria's "stay or go" policy on bushfires, responsible for many deaths, relied on bad history that pursued "historical evidence that supported their preferred management policy" (Griffiths 2009). Flood histories can change dominant narratives, dispel myths about flood prevention, or challenge political and administrative processes. The prevalence of myths – think "dams will save us", "floods come every hundred years" – can be disproven through historical accounts. Policies are cultural; historical accounts reveal the socio-economic and political factors that shape the decisions behind them. Cumulative actions can "lock in" policies, creating a path dependency that limits the range of decisions made in the future and, with the costs of reversal high, make policy change less likely (Gaynor et al. 2022). Historicising past policymaking can help to nudge future policies in new directions, away from path-dependent ones.

The Queensland Floods Commission of Inquiry held after the state's 2011 floods recommended local authorities revise their flood management policies (Queensland Floods Commission of Inquiry 2012: 46–7). In 2020 the Ipswich City Council, in southeast Queensland, rewrote its flood management policies, drawing on my flood history work. The Council's Emergency Management and Sustainability Manager told me that my research stimulated "evidence-backed discussion that allowed examination and validation of our thinking", equipped the Council officers with "historical context to explain current decisions" and "provided an authoritative, non-government view of the complexities of flooding to point to and encourage people to explore these issues themselves".[7] Drawing on history, officers were able to contextualise past policies and explain the need for change at a series of public forums.

My sustained engagement with government agencies and flood practitioners – both during formal policy processes and in more informal ways – has developed trusting relationships, bringing with it further opportunities to engage with various stakeholders and policymakers. Since the February 2022 floods, my voice had value as a conduit between technicians and the wider public. Disaster managers identify community knowledge of hazards as a tool in increasing community resilience, a key to sustainability (Handmer and Dovers 2007; Krüger et al. 2015). With a wet summer predicted for the end of 2022, Ipswich City Council engaged me to conduct a community forum on flood preparedness based on historical precedents, and I have worked with Seqwater (the authority responsible for managing the region's flood mitigation dams) on a series of educational flood videos for wide dissemination. Memories of floods can increase community preparedness and aid the recovery, but scholars have found that flood memories in Australia can fade during periods of drought (Colten and Sumpter 2009; Garde-Hansen et al. 2017; McEwen et al. 2017). Recording the events is an important part the historian can play in assisting flood policy, building community knowledge through narrative. The value of recording stories and providing historical insight was recognised by the Office of the Inspector-General of Emergency Management. In July 2021 it held the inaugural Queensland

Disaster Management Research Forum, where six academic historians presented papers on histories of disasters and three contributed to an interdisciplinary discussion panel. The event was live-streamed to 300 participants globally.[8] The historians provided temporal depth to the discussions and reminded participants of the importance of social and cultural factors when determining policy and the need to consider the human, non-human, and environmental impacts of solutions in the rush to restore the *status quo ante*. Historians can bridge divides, and in 2022 I chaired a roundtable of disaster managers at the second Queensland Disaster Management Research Forum to discuss community involvement in flood resilience.

Policies can create a world without humans, politics, cultural values, and economics – an unreality that ignores the cultural dimensions of science (Carey 2014). As social scientists, one role for historians may be to historicise policy, to put a human face to the consequences of past poor decisions or adherence to path-dependent practices to remind policymakers to draw on collective insights and disciplines to strive for the best possible outcomes. Floods are a hybrid of human and nature's actions and the creation of false dichotomies in flood management policy based on predictions of nature's actions can perpetuate environmental ignorance or cultural blindness that can be fatal.

Conclusion

The efforts of many environmental history colleagues to contribute actively to environmental policymaking are inspirational. Their labours are often hidden out of sight of the peer-reviewed literature that our disciplines, jobs, and funders demand. But it helps to consider these cases alongside the significant and carefully conceptualised policy studies scholarship, too, since the challenges of working at the policy interface are many and substantial, even forbidding – this policy scholarship is a valuable tool for environmental historians. The literature cited in this chapter is clear about the promises and challenges; it is difficult to make one-off contributions to policy. However, within the constraints of policy frameworks and processes, there are opportunities to build working relationships with stakeholders. While historians are rarely the policymakers, our scholarship has the potential to stimulate change. Often it is just as important to concentrate on processes as much as policy substance. Sustained engagement and public activities make the chances for success and influence higher. Patience is key, since frustration is a central experience, and policy "successes" might sometimes (even usually) only be marginal corrections and improvements. As the environmental scholars David Rose and colleagues put it: "Don't give up!" (Rose et al. 2020: 176).

Acknowledgements

Notes

1 Unnamed Australian public servant, email, 14 December 2021. Australian Department of Industry, Science, and Resources, Freedom of Information Disclosure Log Number: 22/004/70320 (www.industry.gov.au).

2 The University of Pennsylvania's Program in Environmental Humanities also contributed to this data rescue: https://ppeh.sas.upenn.edu/historical-page-get-involved
3 https://www.apeoplesepa.org/
4 https://envirodatagov.org/environmental-historians-action-collaborative/ and https://www.our childrenstrust.org/court-orders-and-pleadings (see Brief for 78 Environmental Historians).
5 UN General Assembly, A/CONF.151/26 (Vol. 1).
6 Personal communication, Piet Filet and Margaret Cook, 22 November 2020.
7 Personal communication, Matthew Pinder and Margaret Cook, 14 June 2021.
8 The historians were Deb Anderson, Claire Brennan, Margaret Cook, Rohan Lloyd, Scott McKinnon, and Patrick White. Program and recordings available at: www.igem.qld.gov.au/researchforum (accessed 8 August 2022).

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