

EMERGENCY MANAGEMENT AND POLICY: RESEARCH IMPACT AND UTILISATION

Non-peer reviewed research proceedings from the Bushfire and Natural Hazards CRC & AFAC conference Sydney, 4 – 6 September 2017

Emeritus Professor Stephen Dovers

Australian National University
Bushfire and Natural Hazards CRC

Corresponding author: Stephen.Dovers@anu.edu.au







Business Cooperative Research Centres Programme

All material in this document, except as identified below, is licensed under the Creative Commons Attribution-Non-Commercial 4.0 International Licence.

Material not licensed under the Creative Commons licence:

- Department of Industry, Innovation and Science logo
- Cooperative Research Centres Programme logo

All content not licenced under the Creative Commons licence is all rights reserved. Permission must be sought from the copyright owner to use this material.



Disclaimer:

The Australian National University and the Bushfire and Natural Hazards CRC advise that the information contained in this publication comprises general statements based on scientific research. The reader is advised and needs to be aware that such information may be incomplete or unable to be used in any specific situation. No reliance or actions must therefore be made on that information without seeking prior expert professional, scientific and technical advice. To the extent permitted by law, The Australian National University and the Bushfire and Natural Hazards CRC (including its employees and consultants) exclude all liability to any person for any consequences, including but not limited to all losses, damages, costs, expenses and any other compensation, arising directly or indirectly from using this publication (in part or in whole) and any information or material contained in it.

Publisher:

Bushfire and Natural Hazards CRC

September 2017

Citation: Dovers, S. (2017) Emergency management and policy: research impact and utilization. In In M. Rumsewicz (Ed.), Research Forum 2017: proceedings from the Research Forum at the Bushfire and Natural Hazards CRC & AFAC Conference. Melbourne: Bushfire and Natural Hazards CRC.

TABLE OF CONTENTS

Abstract	4
Introduction	5
Background (i) Policy, or something else? (ii) Disciplining public policy (iii) Information utilisation in policy, and 'evidence-based policy' (iv) On hooks and windows	6 7 7 8 9
In conclusion: a checklist for policy relevance	10
References	12

ABSTRACT

Emergency management is an important and curious sector. Important because of urgency, high stakes and public and political interest; curious because it deals with complex and difficult problems, and it constantly seeks and appreciates improved knowledge. Much discussed over the years has been the need for research to inform policy change (beyond management change), and how such research can be measured in terms of changing the policy settings that define and constrain emergency management. This is a complex matter, and difficult to answer simply.

This paper extends commentary by the author in a keynote address to the CRC/AFAC Research Forum 2012 on the interface of research, policy and politics. Can "policy research" actually change policy and if so how? The paper does not seek to (and nor should it try) answer the question prescriptively, but explores the interface between research, policy, management and politics in four parts:

- 1. Clarifying the relationships between management, policy and politics, and the institutional systems that define these, so that the targets of policy change are better understood.
- 2. How different disciplines relate to policy: some with competence, directly and thus controversially; others less directly, with no inbuilt understanding of public policy and at a safe distance.
- 3. Different forms of ultilisation of information in policy in the context of emergency management (direct, conceptual, political, etc), which are different and need to be understood as such.
- 4. Policy hooks and windows the coincidence of knowledge and events (ie. great ideas wither in calm times; bad ideas take hold in a panic).

A summary checklist is presented, to guide research design and communication and to manage expectations. Clarity in this space is important for research design, and for increasing relevance to policy and management.

INTRODUCTION

Over the course of the Bushfire and now Bushfire and Natural Hazards CRC, there has been an increase in support for research that speaks directly to public policy. How is such research utilized, and how can we measure its impact? This paper does not provide a clear answer, but seeks clarity over the expectations of policy-oriented research, what policies and policy actors might be the targets of such research, and what different kinds of uptake might be expected. The paper draws ideas from the discipline of public policy to: (i) clarify what 'policy' and related terms mean and the implications of that; (ii) map out different research disciplines, their comprehension of policy, and the role of other information providers; (iii) consider different forms of information utilization and the notion of 'evidence-based policy'; and (iv) consider 'hooks' and 'windows', or times and contexts of possible policy change. The paper concludes with a check list to clarify the policy relevance of research and thus of pathways for utilization.

BACKGROUND

Some research if produces a useable 'thing', such as a mapping technique, signaling device, or code of practice for working in heat. Assessing the impact or uptake of such research outcomes is reasonably straightforward: it works or doesn't; it gets used or it doesn't.

Other research produces less tangible results. For example, Eburn and Dovers (2012) and Eburn (2017) make recommendations regarding better ways to run post-disaster inquiries, informed by examination of recent quasi-judicial inquiries, the experiences of those involved, and the efficacy for learning. Many emergency managers agree with our suggestions, but researchers and emergency managers cannot implement this knowledge – the form of post-disaster inquiries is a decision for first ministers, Cabinet, a minister, or an appointed commissioner. They may or may not agree, or even listen.

Consider this continuum:

Practice – Management – Policy – Statute Law – Institutional Settings and Governance.

In terms of research utilization, the further to the left the easier to implement research and measure impact, because practice and management are within the purview of emergency service organisations. The further to the right, the less influence ESOs have, the more within central agencies the power lies, and the more minor an input research is. The further to the right, the more political it gets:

Politics is <u>the</u> essential ingredient for producing workable policies, which are more publicly accountable and politically justifiable ... While some are uncomfortable with the notion that politics can enhance rational decision-making, preferring to see politics as expediency, it is integral to the process of securing defensible outcomes. We are unable to combine values, interests and resources in ways which are not political. (Davis et al. 1993: p257, emphasis in original)

Policy is political, about 'values, interests and resources', about deciding who gets what and who doesn't, whether that be funding, legal rights or access to information, decision processes or places. The policy settings that enable or constrain emergency management are not only or even mostly about EM, and are mostly made in other portfolios, such as land use planning, building standards, infrastructure, communications technology provision – the list is long. Relevant policies also affect other things: public access, conservation, building costs, workplace practices, and public funds not available for other purposes. Policies are trade-offs and compromises. Thus, research findings that have a bearing on policy may be listened to by those who formulate policy (more on that below), but will rarely be the only or dominant consideration. Much else matters, like cost, practicality, public opinion, legal issues, or impacts on other goals like housing affordability. EM research that makes policy recommendations is one voice in the cacophony of noise and information that influences policy in areas like land development, transport, housing and infrastructure.

The next four sections distil key considerations that allow more clarity about the potential of policy research, leading to the subsequent checklist that can be used to appraise the design and outcomes of research. The perspective is drawn

TARRES

from Handmer and Dovers (2013) and Dovers and Hussey (2013), which in turn summarise and apply public policy theory and practice to the contexts of emergency and environmental management. The word limit here precludes fuller coverage of the literature and associated referencing: those so inclined can delve into the voluminous and sometimes turgid public policy literature.

(I) POLICY, OR SOMETHING ELSE?

Is the issue at hand a <u>policy</u> problem? There are some ways of exploring this. First, fascinating research questions are rarely the same as the policy problem faced by an agency or society, and negotiation is required to align the two, or at least frame the research to relate usefully to a policy matter in its findings. Second, 'policy' is a vague term. Simplifying much terminology and theory, the fictitious but believable case of over-achievement below in its <u>emphasised</u> terms indicates the complexity beneath the simple term 'policy':

In line with relevant <u>regulations</u> (subsidiary to <u>statute law</u>) enabling the Emergency Management Procedures (a <u>policy</u>), the Emergency Services Bureau and Forestry Dept (state <u>organisations</u>), ordered controlled burning (<u>management</u> action under a regulatory <u>policy instrument</u>) in the Great Big State Forest. The burn escaped and damaged assets belonging to adjacent landholders, who took legal action arguing negligence (legal doctrine within the <u>institution</u> of the common law) in the District Court (an <u>organisation</u> manifesting that institution). Damages were awarded against the two agencies (<u>responsible authorities</u>). On advice from the Bureau, a commissioned research report, independent inquiry, submissions from the community and legal advice (parts and players in the <u>policy process</u>), a new <u>policy</u> of negotiated, regional fuel reduction plans (new <u>policy instrument</u>) was announced, reflecting a shift from a top-down, regulatory to an inclusive, cooperative <u>policy style</u>.

If research is to focus on or be relevant to policy, then clarity over the difference between say, management, policy, law and institutions is important. By so doing we can define who is responsible for or relevant to the issue/s being investigated, in what ways and with what powers, and how they might be involved in or at least made aware of the research.

(II) DISCIPLINING PUBLIC POLICY

If research is to speak to policy, then the research design and process, and those involved, must reflect a coherent understanding of the public policy process. Some disciplines do, some have partial understandings, and some do not: and that is not a criticism. Policy is a social phenomenon and thus the domain of the social rather than natural sciences (social scientists are awful at fire modelling, by the way). This is important and should be interrogated by research funders and end users. The author's own discipline, public policy, is also a profession and an arena of practice, and that most directly aligned. Related disciplines such as public administration, political science and institutional theory are similarly policyfocused and any practitioner have a clear and communicable conception of the policy process, and stated research methods. Other disciplines are policyoriented, but with a narrower view of policy: eg. law, economics and program

TARRES

evaluation. Other social sciences are <u>policy-relevant</u>, at least to some aspects of policy problems, but lack an overall conception of the policy process (eg. sociology, psychology and demography). Some disciplines in the humanities are policy relevant too, such as history in constructing records of human experience. Policy-relevant in a different way are the natural sciences, having needed perspectives but no explicit grasp of policy, human behavior or institutions.

Appreciating the differences between policy-focused, -oriented and -relevant disciplines is a starting point for engagement. But within each discipline, different schools of theory and thought exist and will shape research fundamentally in terms of assumptions regarding human motivations, the role of particular policy actors and validity of different policy instruments. A neo-classical economist is very different to an ecological or institutional economist, as are a social versus a cognitive psychologist, or a black-letter lawyer versus a law-in-society researcher. Those differences will shape research design, methods, data sought and the findings. This can be challenging, as finding a social scientist who can assist agencies or research funders navigate this may be hard.

Often, a particular disciplinary or professional input to a research project may be brief or minor to ensure relevance to policy, but crucial. If statute law or regulatory implementation is involved, an early discussion with a lawyer can ensure that later findings target the correct statute. Similarly, input to a scientific project from a public administration perspective (whether researcher or agency official) might correct any lack of clarity over policy responsibilities within a federal system and multiple, partly-responsible agencies.

(III) INFORMATION UTILISATION IN POLICY, AND 'EVIDENCE-BASED POLICY'

In a perfect world (which some vainly hope could exist), clear policy problems (they are rarely simple and clear) would be considered rationally by empowered governments (which have many parts and often limited power), acting on solid evidence from experts (consensus on facts may not exist), and robust decisions would be made. In messy reality, three perspectives expose the complicated nature of how information is used in policy: sources of information, forms of information utilization, and the notion of 'evidence-based' policy.

- a) Research and other forms of methodologically clear investigation is one source of information, whether from independent researchers, in-agency work, or (increasingly) consultants. While these may be important, decision makers also use opinion polls, focus groups, lobbyist submissions, parliamentary and other inquiries, media opinion and their own knowledge and judgement (non-research sources of information and argument may or may not be based on robust research).
- b) Information (facts, propositions, opinions) is used variably in policy debates and processes. Quality research or analysis can be used directly or rationally as a prime source of intelligence, in a positive manner: this is termed instrumental use. Information is also utilized in a conceptual manner, not changing decisions directly or soon, but reframing problems, starting new debates, and asking new questions: less direct, but still positive. Less positively, information and even accepted facts can be

used: <u>tactically</u>, to delay or deflect making decisions; <u>strategically</u>, to gain power in a debate through suppression; or <u>politically</u>, using whatever facts suit a pre-determined argument with no consideration of the rigour of those facts. Think climate change.

c) The principle of 'evidence-based policy' is popular and, reverse jokes about 'policy-based evidence' aside (see political use in (b) above), is hard to disagree with. Head (2008) recognizes three 'lenses' of evidence that are used: (i) systematic ('scientific') research; (ii) program management experience; and (iii) political judgement. All three are inevitable and valid. Even where the slightly tighter prescription of 'best available science' (if that indeed can be agreed), there is more besides.

With policy-focused or -oriented research, it is not just 'the science' across (a-c) above, as information from more than one social science will likely be present, and possibly in disagreement, and policy ideas may come from multiple, intersecting sources (eg. research synthesized by consultants or by agencies, different research picked up by lobbyists in their submissions, other sources (mis) quoted in the media, etc.).

(IV) ON HOOKS AND WINDOWS

Policy change is uneven: the oft-drawn 'policy cycle' spins unevenly, stalls, goes into reverse and jumps gears. However useful a research finding, if the five-year management plan has just been released the research may be easily and justifiably ignored. Ditto if the budget for a program is irrevocably set and committed. Policy research and advocacy need to be aware of policy 'hooks' and 'windows', times where change is more possible, enhancing the uptake of research findings, or at least the chance of being considered. Consider two broad categories:

- a) Predictable or regular, for example the lead up to an election or budget, the later stages of an existing program or a scheduled policy review (directly in EM, or in an adjacent and relevant sector). Ears, and perhaps budget purse strings, are more open at these times.
- b) Unpredictable or irregular: changes of government or Minister, a crisis event, unexpected developments in a related sector, technological shifts, or a sudden change in an international situation or policy.

In our field, the 'crisis' moment and opportunity after a major disaster (and the inevitable inquiry) is not unpredictable: we know it will happen, just not where or when. To have well-researched policy ideas ready is unlikely to be a waste of time – such ideas can have a fair shelf-life – and is certainly preferable to belatedly entering the contest unprepared against the predictable avalanche of bad ideas that proliferate at such times.

IN CONCLUSION: A CHECKLIST FOR POLICY RELEVANCE

The foregoing is a truncated treatment of relevant areas of public policy. Box 1 distils this into a framework to be used to negotiate connections between research and public policy, usable by research funders, researchers and endusers – preferably all three together – to reach common understanding of the potentials and limitations of research. It can also make clear where research may have little bearing on policy (that is not a negative).

Box 1: A checklist for linking research and policy in emergency management

Guiding questions:	Considerations:
1. Is it really 'policy'?	Is the issue under investigation a <u>public</u> <u>policy</u> matter, or does it relate to more operational management, or to larger considerations of social values, institutional settings or governance styles?
2. What's the policy problem?	Ensuring that the <u>research questions</u> and hypotheses, and thus the subsequent data gathering and analysis, match sufficiently with a defined <u>policy problem</u> so that findings are relevant to the policy community.
3. Who might listen, and why? And, should and if so how can they be connected to the research design and process?	(i) Defining the portfolios of government, and specific agency sections, relevant to addressing the policy problem. These may be within EM or in other portfolios; alone or in combination.
	(ii) What kinds of information and learning do these actors seek: instrumental, conceptual, strategic, tactical?
	(iii) What other information inputs are relevant to the policy problem (media, interest groups, public opinion, other research). Can these inputs be accounted for in the research?
	(iv) How can research findings be best presented to the relevant audience?
4. What policy tools are likely to be considered?	Usually, a limited range of policy instrument options (from the very many available: eg. regulation, standards, price mechanisms, education, training) will be realistically on the table: do these suggest particular research skills or strategies to be needed?

5. What disciplines are needed?	Given (1-4) above, what research disciplines and sub-disciplines are required, to provide suitable theoretical propositions, methods, data capture, communication of results, etc. What mix of the policyfocused, -oriented and -relevant should be assembled, for what parts of the research process?
6. Any policy hooks or windows?	In the area of investigation, are there policy 'hooks' or 'windows' such as strategic reviews, parliamentary inquiries and budget or program cycles that present opportunities for communicating the research and policy implications?

A final observation. Subject to funding contracts and clearances by a funding agency, academic researchers can make policy-oriented material and even policy critiques and recommendations public through open, peer-reviewed literature and other means. Mostly, those in ESOs cannot do so publicly or loudly, nor can consultants. While it is rare that criticism or questioning of sensitive policy matters are singular research 'discoveries' or findings, but more often are being discussed around the sector, it is a benefit of researcher engagement that they can speak and write openly, bolstered by transparent methods and peer review quality control. Is that half the value of supporting policy-oriented research?

This article has not simplified the research-policy interface but hopefully has clarified it. The checklist above may be valuable at minimum for the management of expectations, but perhaps also in more specific design of a research project and of the policy targets it is or is not relevant to.

REFERENCES

- Davis, G., Wanna, J., Warhurst, J. and Weller, P. *Public policy in Australia*. Allen and Unwin: Sydney; 1993.
- Dovers, S. and Hussey, K. Environment and sustainability: a policy handbook. 2nd edition. Federation Press: Sydney; 2013.
- Eburn, M. Reviewing high risk & high consequence decisions: finding a safer way. AFAC Conference, Sydney, 4-7 September 2017.
- Eburn, M. and Dovers, S. Learning lessons from disasters: alternatives to Royal Commissions and other quasi-judicial inquiries. Aust J Public Admin: 2015. 74(4): 495-508.
- Handmer, J. and Dovers, S. Handbook of disaster policies and institutions: improving emergency management and climate change adaptation. 2nd edition. Routledge: London; 2013.
- Head, B. 2008. Three lenses of evidence-based policy. Aust J Public Admin. 2008. 67(1): 1-11.