Understanding policy change in flood risk management

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ABSTRACT

Policy change in the field of flood risk management is important as it alters the direction of attention, effort and investment. We elaborate three models of policy change developed in the political science literature. These models embrace concepts such as 'policy streams', 'advocacy coalitions', and 'punctuated equilibrium' and each has been important in illuminating the process of policy change in different discipline areas in the last 20 or 30 years. Each has been refined over this time but remains fundamentally unchanged. From this elaboration we distil an integrated model that we believe is particularly applicable to flood risk management, and have some general applicability outside the UK where it originated. This model emphasises both catalytic and incremental policy change, the former related to national scale flood events and the latter to intervening relatively flood-free periods.

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1. Introduction

We need to understand the process of flood policy change in order to influence it so as to lead to better policies in the future than exist today. That understanding is best accomplished with an acknowledgement of the theories of policy change that have been developed in the past. This involves evaluating the models of policy change put forward there that simplify the underlying processes and make them more comprehensible and applicable to different fields to those in which they have been developed, for example to our field of flood risk and flood risk management (FRM). Understanding here is also enhanced if we appreciate the role that major 'catalytic' flood events can have on the policy process [23,22,47], whilst also acknowledging the roles of the intervening processes of incremental change.

Simplifying (or modelling) the processes leading to changes in public policy has long dominated the thinking of political scientists, from early writers such as Harold Lasswell [28] and David Easton [15] to more contemporary thinkers such as John Kingdon and Paul Sabatier (see below). Underlying these debates is the general agreement that policy changes as a consequence of changes in human behaviour. It is, however, precisely the debates concerning the causes of this human behaviour change, which differentiates the theoretical approaches to the study of policy, and indeed why there could never be a single theory of policy change.

A fundamental question is whether policy changes as a result of socio-economic processes or human agency? Is it a function of institutional opportunities or constraints? Is it the networks of relations between actors, the preferences and choices of the actors themselves or their beliefs, ideas and interests that are the dominant cause of changes in policy [21]? It is not the intention here to expand on the long history of debate surrounding these questions. Rather, it is important to distinguish the underlying assumptions of these debates and how they impact on the development of

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our understanding of the changing policies towards floods and FRM. In this sense, we should not regard the theoretical positions advocated to be in competition, but agree with John [21] who states that:

'…only an integrated framework, one that utilizes important insights from all of the approaches, can fully explain the variety and complexity of the practice of policy-making and implementation. The approaches or theories are not rivals; they can complement each other, and be part of an overall explanation' [21]

To achieve such an integrated framework, we have drawn on insights from three theoretical positions and their originators, which include Kingdon's Multiple Streams Approach (MSA) [25,26], the work of Sabatier and colleagues on Advocacy Coalition Frameworks (ACF) [57,59,60] and Baumagartner and Jones [3] concept of the Punctuated Equilibrium. It is important to note here that although there have been many reviews, new developments and refinements of the major policy process theories presented here (e.g. [24,6,66]), the fundamental characteristics of those ideas and theories have not changed to any marked degree over the last 30 years. Indeed, it is that very endurance of these ideas that helps to give them continuing relevance.

In discussing these three approaches to an analysis of the policy process we emphasise the effect of shocks on that process, given our interest in floods as episodic phenomena which have the effect of disturbing the *status quo ante*. Analysing the effect of shocks on the policy process leads us to emphasise the role of those 'catalytic' events; others have described these as "Focusing Events" [6]. Whilst we see the value of the latter term, because major flood events do focus the attention of many actors, we believe the term 'catalytic' is more powerful in emphasising the way shock events influence and indeed accelerate policy issues which are either already underway or dormant but potent. As such the discussion of policy process theory here cannot be comprehensive, but we consider this as an inevitable consequence of our necessary selectivity regarding "shock" dimensions.

We recognise that our thinking is focused on a particular subset of policy theorising which deviates from those now classical theorists who regard institutions as the dominant force of policy decision-making [36,17,30,31,41,42,43,71,40,8], those who regard socio-economic conditions as dominant ([72,20] and those who regard the individual actors as dominant [14,64,51]. Rather, we have argued [23,22] and repeat the point here that institutions, socio-economic conditions and actor preferences are all important contextual factors in the policy-making process but do not determine how and why policy changes. Instead, we hypothesise that the factors driving policy change are a combination of contextual factors, behavioural factors and the occurrence, or otherwise, of some form of catalysing event which in our case is a 'national scale' flood (which is likely to be different in different countries)[1]. It is these factors which frame how problems are defined, issues are negotiated and agendas are set. Here, ideas and issues are dominant, rather than institutions or individuals.

In this paper our aim is to discuss theories of the policy process but not to elaborate new case studies or other research on the application - or testing - of these ideas in relation to FRM. Instead we restrict our attention to reviewing existing policy studies literature and its contribution to theorising and policy understanding in this area. The ideas have been applied previously by us and col-

leagues to case study research in the UK [22], Bangladesh [65] and South Africa [63] but we do not intend to repeat details of that material here although a conclusion from some of that work is presented towards the end of this paper as our model of the FRM policy process.

2. Multiple streams

John Kingdon's multiple streams approach (MSA) [25,26], founded on an analysis of the US Federal system, is fundamentally concerned with understanding how issues materialise, how they come to the attention of policy makers, how they are framed as ideas in policy agendas and why ideas 'have their time' [45]. As an examination of the political process, Kingdon is specifically interested in the agenda setting process, recognising in particular the role of individual actors, institutions and external events on the relationship between solutions, problems, issues and ideas. Following from Lindblom [29], Kingdon regards policy change as a continuous process of learning and adaptation rather than one of rationality and stability. At the heart of his analysis is the assumption that policies are formed, and agendas are set, as a result of three separate and distinct 'streams': problems, policies and politics (summarised and critiqued by [24].

The 'problem' stream is one in which the attention of the public and policy-makers is focused on something requiring attention: in our case floods and flood risk reduction. This he believes is brought about by three mechanisms: *indicators* of the scale and change in problems; *events* which focus attention on a problem; and *feedback* from previous policies. Each of these processes provides the conditions for the emergence of a 'problem', such as serious flooding, in need of attention.

The solutions to the problem emerge in the form of ideas in what Kingdon calls the 'policy stream'. These solutions, or ideas, float around in a policy 'primeval soup', dropping on and off the policy agenda, a concept founded on Cohen et al. [12] garbage can model of organisational choice. Policy communities are important because it is these communities, and certain policy entrepreneurs within them (see [4,35], who invest time and resources in ensuring that certain ideas gain popularity within institutions and organisations such that they progress to, and remain on, the agendas of governments and their agencies. The accumulation of knowledge and the development of interests among actors in these communities is important here [21].

Finally, the 'political stream' determines how the emerging problems are defined. Here, therefore, public opinion, political activism, the media and Government personnel are all important for influencing the definition of the problem and the assessment of potential solutions. We can see such processes at work in all major floods, such as in the UK in 2007 when 55,000 homes were flooded and media and government attention was substantially elevated and an enquiry ensued [49] which advocated major policy change which emerged as legislation two years later (in the Flood and Water Management Act 2010).

For policy change to occur in anything other than an incremental fashion an idea needs to 'catch-on' and dominate the policy agenda. This, Kingdon argues, occurs when there is a 'policy window', brought about or responded to by the coming together of the three streams. In these conditions, a problem is recognised, and policy communities and entrepreneurs – often dominant in sub-national issues [54,11] and perhaps working in collectives [35] – can press for their ideas to form solutions to the problem at a time when there is political receptivity to the defined problem and the proposed solutions. Such a 'window of opportunity' does not occur often or stay open for long due to the issue attention cycle curtailing its longevity [13,21]. Moreover not all such

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[1] Such an event is not easy to specify but is one which can be large in geographical extent, or particularly intense, or very threatening, or especially enduring. In the UK this corresponds to the recent floods in 2000 (widespread), 2007 (Hull, etc), 2004 (Boscastle) and 2014 (Somerset) respectively. We do not mean such events are nationwide, any more than were the undoubtedly national scale US events of Katrina or Sandy.