APPENDIX 1. Combining IPA and SNA.

Interpretive policy analysis (IPA) emerged from political science and planning disciplines as a critique of the uncritical positivism of much policy analysis. IPA approaches are characterised by the reflexive and critical study of the informal and hidden aspects of policy processes and institutions as sites of meaning creation and contest (Wagenaar 2011, Hajer and Wagenaar (eds.) 2003, Fischer and Forester (eds.) 1993). Research design and methods are consequently directed towards reconstructing something of actors' perceptions of particular processes through the creation, collection and analysis of qualitative data.

Social Network Analysis (SNA) is a quantitative approach to the study of social relations and their structure (Wasserman and Faust 1994, Prell 2012). This approach originated from sociology, and combines theoretical concepts, methods and analytical techniques that help reveal the structure of social relations and how these might influence social behaviour. It is built on the concept of networks, which are made up of nodes, that can represent individual people or organisations, and the ties or relations between them, that can be characterised by whatever relation is of interest to the researcer, such as friendship, trust or information exchange. SNA is becoming increasingly popular as a way of understanding how social structures might affect natural resource governance (see Bodin and Prell 2011).

In this paper, SNA and IPA are 'combined'. This endeavour concerns the attempt to co-ordinate, practically and philosophically speaking, these two approaches across the various overlapping stages of empirical research, from research design and strategy, through data creation / collection and analysis, to the writing-up and dissemination of insights and findings (Tashakkori and Teddlie, 1998). Combining also addresses the philosophical issues problems and advantages - behind the bringing together of approaches rooted in 'positivist' and 'post positivist' paradigms. Here debates about the nature of truth and knowledge, are acknowledged insofar as the approaches and their particular world views are retained and respected, and resolved to the extent that the paper is presented in a style familiar and accessible to SNA and positivist approaches more generally, with interpretist preoccupations and insights contributing to research design, data collection, triangulation, writing and dissemination. The practical combining of the SNA and IPA is founded partly on the development of an appropriate disposition and working relationship between the researchers across the research stages, and on a particular understanding of triangulation, one which elaborates on definitions which emphasise the achievement of internal validity or the 'adjudication between accounts' towards the usage of the term to denote the checking and comparison between accounts. This understanding of triangulation entails 'corroboration', the development of the internal validity or credibility of the research by checking the consistency of accounts; 'elaboration', an increase in the number of sources of data highlighting different perspectives; and 'initiation' or 'illumination' which refers to the use of non-convergent data in the development of findings (Rossman and Wilson 1985). The goal of triangulation as presented here is not necessarily about arriving at a single, clear cut account or findings regarding, in this case, the SWSG. Data may converge, but they may also diverge, and this can lead to a deeper, finer grained understanding.

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