Enablers and Barriers at the Science-Policy Interface: Case Studies on Scientific Information Use in Environmental Decision-Making

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Understanding the apparent disconnect at the science-policy interface between the information and knowledge produced by scientists and that used by policy makers is essential if we are to effectively address global environmental problems. This poster describes the key enablers and barriers to the uptake of scientific information in decision-making, drawing on the results of case studies conducted by the Environmental Information Use and Influence research team at Dalhousie University of the information pathways – production, communication, and use – in national, regional, and international governmental organizations. Governmental information included state of the environment and resources reports, coastal atlases, and technical assessments – many of which are relevant to the Bay of Fundy – published in print and digital formats. The case studies utilized an array of methods including, citation analysis of references to published reports, semi-structured interviews of scientists and decision-makers (managers and policy advisors), direct observations at scientific and management meetings, analysis of organizational website statistics, content analysis of reports, and network analysis of the interaction of stakeholders in policy-making. The authority of organizations, related to their mandates, is a critical requirement for creating credible and relevant information for decision-making. Yet, awareness remains a major barrier to effective and widespread communication and use of this information in coastal and ocean management. Audiences vary from small groups to the interested public, i.e., persons with a known involvement in environmental management. Our research has found that particular individuals, groups, or organizations can bridge the science-policy "divide" to enhance communication between science and decision-making realms. Co-production of information broadens the scope of the available information for decision-making, thereby ensuring its legitimacy. Knowledge of such characteristics of the interface can have direct applications in the information pathways in decision-making in the Bay of Fundy region, resulting in substantial environmental and societal benefits.