## **Center for Community-Based Resource Management (CBRM)**

## **Natural Resources Institute, University of Manitoba**

## **CBRM Database**

Date: Feb 10, 2010	Entry Number:	1230
Case Study Name:	Observations on Drivers and Dynamics of Environmental Policy Change: Insights from 150 Years of	
	Forest Management in British Columbia	
Author:	Shannon M. Hagerman, Hadi Dowlatabadi, Terre Satterfield	
Document Type:	Journal paper	
Year:	2009	
Language:	English	
Document Location:	Ecology and Society	
Full Citation:	Hagerman, S., H. Dowlatabadi, and T. Satterfield. 2010. Observations on Drivers and Dynamics of Environmental Policy Change: Insights from 150 Years of Forest Management in British Columbia. Ecology and Society 15(1): 2	
Region:	North America	
Country:	Canada	
Ecosystem Type:	Mountain ecosystems, northern coniferous forest (boreal), alpine tundra, desert, grassland, wetland	
Social Characteristics:	Urban, agriculture, construction, mining, tourism	
Scale of Study:	Provincial, regional	
Resource Type:	forestry	
Type of Initiative:	Research driven	
Community-Based Work:	Resource management, conservation	
Keywords:	British Columbia; change; drivers; forest management; global change; historical analysis; science and policy; social–ecological system; uncertainty; command and control	

Summary:	Human and ecological elements of resource management systems co-adapt over time. In this paper, we examine the drivers of change in forest management policy in British Columbia since 1850. We asked: How has a set of system attributes changed over time, and what drivers contributed to change when it occurred? We simultaneously examined a set of three propositions relating to drivers and dynamics of policy change. We find that factors contributing to the level of impacts, like technology, changed substantially over time and had dramatic impacts. In partial contrast, the institutions used to exercise control (patterns of agency and governance) remained the same until relatively recently. Other system attributes remained unchanged (e.g., the concept of ecosystems as stable entities that humans can manage and control). Substantive, decision-relevant uncertainties characterized all periods of management but did not act as a barrier to the adoption of new regimes at any time. Against this backdrop of constancy in some attributes, and change in others, a few exogenous drivers (e.g., technology, war, markets, legal decisions, ideas, and climate) triggered episodic reexamination of guidelines for resource management. The implications of these findings for future policy change in this system are discussed