

ID: W2955333626

TITLE: Barriers and opportunities for social-ecological adaptation to climate change in coastal British Columbia

AUTHOR: ['Charlotte K. Whitney', 'Natalie C. Ban']

ABSTRACT:

Climate change poses novel and complex challenges to planning, management, and policies for marine and coastal social-ecological systems. Despite ongoing discussion of adopting interventions for improving adaptation and adaptive capacity to climate change, practitioners often continue to carry out conventional management strategies that do not effectively incorporate climate change impacts and projections. Using a web-based survey and semi-structured interviews, we explored the perceptions of practitioners (coastal managers and planners) in British Columbia, Canada relative to climate change risks, adaptation actions for social and ecological systems, and barriers for adaptation within the region. Overall, practitioners shared a concern that climate change is not currently well incorporated in management or policy in this region, and noted significant implementation gaps. Practitioners expressed more support for ecological adaptation actions that are well suited to regional implementation, such as incorporating climate change projections into management and reducing fisheries overexploitation, than for actions such as protecting specific areas. Social adaptation actions were overall perceived as less useful than ecological adaptation actions, and actions that would support local management and monitoring efforts were viewed as more useful than developing alternative livelihoods. The main barriers and associated opportunities for climate change adaptation in marine management included political action, reducing scientific uncertainty, improving communication, and increasing capacity (both funding and staff). Additional opportunities include effective engagement with Indigenous governance, improving policies and funding for adaptation including monitoring, and focusing efforts on communication and education programs specific to practitioners and communities. This study demonstrates the necessity of collaboration across scales of management for effective climate change adaptation.

SOURCE: Ocean & coastal management

PDF URL: None

CITED BY COUNT: 29

PUBLICATION YEAR: 2019

TYPE: article

CONCEPTS: ['Climate change', 'Environmental resource management', 'Adaptation (eye)', 'Adaptive management', 'Corporate governance', 'Adaptive capacity', 'Climate change adaptation', 'Environmental planning', 'Livelihood', 'Business', 'Geography', 'Ecology', 'Agriculture', 'Environmental science', 'Psychology', 'Neuroscience', 'Biology', 'Archaeology', 'Finance']