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Stakeholder and Resource Manager Responses to the Chinook Salmon Fishery Collapse in Lake Huron: Informing Future Decision-making

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ABSTRACT:

In the mid-1990s, the alewife (*Alosa pseudoharengus*) population in Lake Huron supported a thriving Chinook salmon (*Oncorhynchus tshawytscha*) fishery, but in 2003, the alewife population collapsed and Chinook salmon followed. The fishery has not recovered. We documented how managers and stakeholders responded to the fishery collapse, determined the key drivers of these responses, and identified those responses that could help adaptation to future fishery challenges. We conducted our research through: (a) a content analysis of relevant written documents documenting the recognition of the change in the fishery and the response to it; and (b) interviews with managers, researchers, and stakeholders (charterboat captains and anglers) from throughout the Lake Huron region. Managers responded to the fishery collapse through research, stakeholder engagement, and reducing stocking of Chinook salmon in two stages. Stakeholders responded by shifting to target different lakes or species. Factors that contributed to the development of these responses included a well-established regional network of managers and researchers, which facilitated dialogue, development of a common understanding of the problem, and action; a substantial research base and capacity to conduct additional research to address information gaps; and structures for engaging stakeholders in discussions about the crisis and how they could adapt to it. Factors that slowed response to the fishery collapse included initial uncertainty about whether and how the fishery was changing and the factors driving that change; and the importance of balancing the need to respond quickly with the need to gather stakeholder input.