



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE**

Alaska Fisheries Science Center
BIN C15700; Building 4
7600 Sand Point Way NE
Seattle, WA 98115

October 2, 2003

Dr. Vera Alexander
School of Fisheries & Ocean Science
University of Alaska
245 O'Neill Building
Fairbanks, AK 99775-7220

Dear Dr. Alexander:

Members of the fishing industry on the west coast of the United States are concerned over the effect of a climate regime shift on the economic viability of their businesses. Following the strong 1997-1998 El Nino, the North Pacific climate underwent a rapid and striking transition. Up welling-favorable winds strengthened over the California Current (CC), and the Pacific Decadal Oscillation (PDO) reversed sign and remained negative through the summer of 2002. In the northern CC, the zooplankton biomass doubled and switched from a prevalence of warm water species to cold water species. Coho and chinook salmon stocks rebounded, and anchovy and osmeriid stocks increased. In contrast, ocean conditions in the Bering Sea and Sea of Okhotsk did not show a strong 1997-1998 shift. In these regions, the major shift in climate forcing occurred in 1988-1989. Persistent changes in atmosphere and upper ocean fields along with changes in ecosystem structure suggest that a regime shift may have occurred, similar to shifts observed in 1925, 1947, and 1976; or perhaps, there are alternative explanations for the observed changes. Such shifts can seriously affect the fishing industry and consumers.

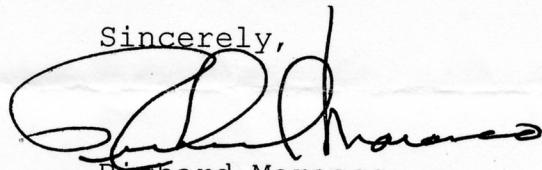
These phenomena have given rise to the following questions: 1) has the North Pacific shifted to a different state or regime since the late 1980s, 2) what is the nature of the new state, 3) what are the ecosystem responses, 4) how long can the shift be expected to last, 5) is it possible to predict when the regime will shift back, and what indicators should be used to determine when it happens, and 6) what are the implications for the management of marine resources? The United States is requesting that PICES provide it with advice on these issues. It is proposed that a workshop be held on the west coast of the United States in June of 2004. The purpose for convening a PICES



workshop is to produce an international consensus on issues relevant to resource management.

The United States hopes that this request is considered favorably by the PICES Governing Council at its upcoming annual meeting. The United States as the requesting party is prepared to support the workshop by providing facilities, United States scientists working within the PICES framework, and funds if necessary.

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard Marasco', written in a cursive style.

Richard Marasco
United States Delegate

cc: G. Boehlert
A. Bychkov
W. Fox
M. Sissenwine
M. Tillman
I. Perry