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The West Coast Ocean Acidification and Hypoxia Science Panel: Major Findings, Recommendations, and Actions

Alexandria Boehm[1], Francis Chan[2], Jack Barth[2], Elizabeth Chornesky[3], Andrew Dickson[4], Richard Feely[5], Burke Hales[2], Tessa Hill[6], Gretchen Hofmann[7], Debby Ianson[8], Terrie Klinger[9], John Largier[6], Jan Newton[9], Thomas Pedersen[10], George Somero[1], Martha Sutula[11], Waldo Wakefield[12], George Waldbusser[2], Steve Weisberg[11], Elizabeth Whiteman[13]

[1]*Stanford University, Stanford, CA*

[2]*Oregon State University, Corvallis, OR*

[3]*Independant Consultant*

[4]*University of San Diego, Scripps Institution of Oceanography, La Jolla, CA*

[5]*NOAA Pacific Marine Environmental Laboratory, University of Washington, Seattle, WA*

[6]*University of California, Davis, Davis, CA*

[7]*University of California, Santa Barbara, Santa Barbara*

[8]*Insitute of Ocean Sciences, Sidney, British Columbia, Canada*

[9]*University of Washington, Seattle, WA*

[10]*University of Victoria, Victoria, British Columbia, Canada*

[11]*Southern California Coastal Water Research Project, Costa Mesa, CA*

[12]*NOAA Fisheries Northwest Fisheries Science Center, Oregon State University, Corvallis, OR*

[13]*California Ocean Science Trust, Oakland, CA*

INTRODUCTION

Harmful algal blooms (HABs) and algal toxins have increased globally in geographic range, frequency, duration, and severity in recent years. These increases have been attributed to various anthropogenic factors; the most significant include climate change, nutrient loading, and water residence time. HABs are problematic because they can affect multiple beneficial uses including recreation, aquatic life, and drinking water by reducing aesthetics, lowering dissolved oxygen concentration, causing taste and odor problems, and producing potent toxins. In recent years, cyanobacteria blooms and their associated toxins have gained national attention due to the severity of issues in the Midwest, and resulted in the release of health advisory values for drinking water by U.S. Environmental Protection Agency. In California, toxic HABs caused by cyanobacteria (CyanoHABs) have been a recurring and escalating issue throughout the state, particularly in the Klamath River watershed, Clear Lake, Pinto Lake, Sacramento and San Joaquin River Delta, Lake Elsinore, and East San Francisco Bay Area lakes. Additionally, Copco and Iron Gate Reservoirs, the Klamath River, and Pinto Lake were placed on the State's 303d list due to impairment caused by cyanotoxins. In 2012, the State's Surface Water Ambient Monitoring Program (SWAMP) sponsored a statewide workshop in response to the growing concern about cyanotoxins. One of the key recommendations from the workshop was to develop a statewide long-term vision and strategic plan to address CyanoHABs and other freshwater HABs.

Full text:
http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/926_WestCoastOAHSciencePanel.pdf