

Liquid Robotics, Inc. 1329 Moffett Park Drive. Sunnvvale, CA, 94089

September 05, 2012

The Honorable John Laird Chair California Ocean Protection Council California Natural Resources Agency 1416 Ninth Street, Suite 1311 Sacramento, CA 95814

Dear Secretary Laird:

Please accept this letter as an expression of support from Liquid Robotics, Inc., for the OPC's adoption of the MOU between the West Coast Governors Alliance on Ocean Health (WCGA) and the West Coast Ocean Observing Systems (OOS) that will be considered by the OPC on September 13, 2012.

Liquid Robotics, Inc. (LRI) specializes in the development of the Wave Glider, a robotic ocean observation platform that autonomously travels the world's oceans while collecting ocean data. The Wave Glider is a customizable platform designed to support a wide variety of sensors for ocean observation. Data from its missions is transmitted to shore via satellite in real time.

Liquid Robotics has developed strong collaborative relationships with the West Coast OOS on advancing the glider platform in support of ocean observation. In addition to serving on the governing board of the Central California Ocean Observing System (CeNCOOS), LRI is readily engaged in ongoing research and data collection efforts with partners across the Northwest Association of Networked OOS (NANOOS) and the Southern California Coastal OOS (SCCOOS) networks. This work is helping to characterize important resources and processes of our Nation's Coast from whale and shark populations to long-term environmental trends such as increasing ocean acidification. The ability to form meaningful partnerships and share pertinent information is critical to the evaluation and ensuring the health of ocean ecosystems.

As an industry partner with the West Coast OOS, Liquid Robotic, Inc. fully supports the proposed MOU. We believe that this formal relationship between the WCGA, the West Coast OOS, and the variety of industry and non-profit partners within the OOS networks will increase the efficiency in the provision of useful ocean data to decision makers and the user community.

We encourage the OPC to adopt the resolution proposed by staff that would authorize the OPC Chair to enter into this agreement. Thank you for your attention to this important issue.

Sincerely,

Kyle VanderLugt, Ph.D. Director of Program Development Liquid Robotic, Inc.



August 22, 2012

The Honorable John Laird, Chair California Ocean Protection Council California Natural Resources Agency 1416 Ninth Street, Suite 1311 Sacramento, CA 95814

Dear Secretary Laird:

We enthusiastically encourage the California Ocean Protection Council (OPC) to adopt the proposed resolution at the OPC's September 13, 2012 meeting that authorizes the OPC Chair to enter into a Memorandum of Understanding (MOU) between the West Coast Governors Alliance on Ocean Health (WCGA) and the West Coast Ocean Observing Systems (OOS).

The California Current Acidification Network (C-CAN) is a collaborative effort between members of the West Coast shellfish industry and scientists to explore what is causing shellfish losses on the Pacific coast, what role ocean acidification and other factors might be playing in this problem, and how to adapt to these changes in order to sustain West Coast shellfish resources. We work closely with shellfish growers, scientists, the West Coast OOS, and staff from state and federal agencies throughout the West Coast to achieve these goals. Indeed, a founding purpose of C-CAN is to encourage enhanced coordination, communication and collaboration between these stakeholder groups with regard to ocean acidification and its impacts on West Coast shellfish resources.

We believe that a formal agreement between the WCGA and the West Coast OOS will strengthen West Coast-wide coordination on ocean observing and management related issues, leading to increased efficiency and effectiveness of WCGA and OOS projects in shared priority areas—including ocean acidification. As a collaborative entity with a West Coast perspective, we understand that as each state, federal agency, or observing system makes investments, it is important that the products of those investments and decisions be compatible and interoperable with the related decisions and investments made by others in the region.

We strongly support the OPC's adoption of the resolution that would authorize the OPC Chair to enter into this agreement that will ultimately benefit ocean users and coastal communities on the West Coast.

Sincerely,

Anobew Dickson

Prof. Andrew G. Dickson (on behalf of the C-CAN steering committee)



September 10, 2012

The Honorable John Laird Chair, California Ocean Protection Council California Natural Resources Agency 1416 Ninth Street, Suite 1311 Sacramento, CA 95814

Dear Secretary Laird:

On behalf of NOAA's Western Region Collaboration Team, and as the Department of Commerce federal co-lead to the West Coast Governors Alliance on Ocean Health (WCGA) Executive Committee, I am writing to encourage the California Ocean Protection Council (OPC) to adopt the resolution authorizing the OPC Chair to enter into a Memorandum of Understanding (MOU) between the WCGA and the West Coast Ocean Observing Systems (OOS) at the OPC's September 13, 2012 meeting.

The West Coast OOS are the three regional components of the U.S. Integrated Ocean Observing System (IOOS) whose boundaries encompass California, Oregon, and Washington: the Southern California Coastal Ocean Observing System (SCCOOS), the Central and Northern California Ocean Observing System (CeNCOOS), and the Northwest Association of Networked Ocean Observing Systems (NANOOS). These systems are committed to working cooperatively, with a single voice, with governmental and non-governmental entities to identify and provide ocean and coastal data and information products to guide and inform ocean management and use. This commitment reflects the belief that by functioning as a coherent network - at the large marine ecosystem scale, each OOS is more efficiently and effectively able to address unique management issues that span individual service boundaries. This approach is consistent with that of the WCGA.

The WCGA and West Coast OOS have a common geographic focus and a shared interest in the effective management of coastal and ocean resources. A formal agreement between these parties will enhance West Coast-wide coordination on ocean observing and management related issues in the context of dynamic ocean conditions and complex governance and management structures. The proposed MOU establishes clear lines of communication and a formal, institutionalized process for working together that will increase the efficiency and effectiveness of projects that address shared priority areas including harmful algal blooms, ocean acidification, surface current mapping, and a regional data network.

I strongly support this effort between the WCGA and the West Coast OOS and encourage the OPC to enter into this agreement that will ultimately benefit WCGA stakeholders and the users of the IOOS system in California, Oregon and Washington.

Sincerely,

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John E. Stein NOAA Western Region Collaboration Team Lead





NANOOS: Northwest Association of Networked Ocean Observing Systems 1013 N.E. 40th Street Seattle, WA 98105-6698 www.nanoos.org

CeNCOOS: Central and Northern California Ocean Observing System 7700 Sandholdt Rd Moss Landing, CA 95039 www.cencoos.org

SCCOOS: Southern California Coastal Ocean Observing System 9500 Gilman Drive, MC 0214 La Jolla, CA 92093-0214 www.sccoos.org

The West Coast Ocean Observing Systems

August 22, 2012

The Honorable John Laird Chair California Ocean Protection Council California Natural Resources Agency 1416 Ninth Street, Suite 1311 Sacramento, CA 95814

Dear Secretary Laird:

We are writing in strong support of the resolution authorizing the Ocean Protection Council (OPC) Chair to enter into a Memorandum of Understanding between the West Coast Governors Alliance on Ocean Health (WCGA) and the West Coast Ocean Observing Systems (OOS) that will be considered by the OPC on September 13, 2012.

The West Coast OOS are the Southern California Coastal Ocean Observing System (SCCOOS), the Central and Northern California Ocean Observing System (CeNCOOS), and the Northwest Association of Networked Ocean Observing Systems (NANOOS). Together, we provide key ocean and coastal observations, data, and information products through collaborations between academic institutions, state and federal agencies, private industry, and non-profit organizations. We share responsibility for observing the West Coast of the United States. We are committed to jointly planning observations on this scale and sharing information that will mutually benefit each subregion, State, and West Coast as a whole. In addition to a common geographic focus, we have a shared interest with the WCGA in the effective management of coastal and ocean resources for the benefit of current and future generations. We also share certain priority theme areas including harmful algal blooms, ocean acidification, surface current mapping, and a regional data network. Accordingly, we have a strong interest in collaborating with each other to leverage human and financial resources.

The proposed MOU will provide a formal mechanism for ensuring that the OOS's collaborative efforts are responsive to the comprehensive West Coast stakeholder community and that the WCGA's efforts incorporate and leverage the best available ocean observation-based information. Specifically, the MOU will enable increased efficiency through clear lines of communication and a formal, institutionalized process for working together that takes advantage of existing WCGA structures. It will increase

our effectiveness by providing a platform for the planning of future work in shared priority areas along the West Coast as a whole, as well as within state or local areas. As each state, federal agency, or observing system makes investments in these areas, it is important that the products of those investments and decisions be compatible and interoperable with the related decisions and investments made by others in the region. Formalizing our commitment to work together will also provide the WCGA and West Coast OOS with a competitive edge when competing for limited federal funding.

We encourage the OPC to adopt the resolution proposed by staff that would authorize the OPC Chair to enter into this agreement. Thank you for your attention to this important issue.

Sincerely,

5 Leslie Rosenfeld Julianna Q. Shomes

Jan Newton **Executive Director** NANOOS

Leslie Rosenfeld Program Director CeNCOOS

Julie Thomas **Executive Director** SCCOOS