

**NOAA Science Advisory Board
Oceans and Health Working Group (OHWG)**

Terms of Reference

Background

As the Nation's lead civilian ocean agency, NOAA has a long history of addressing "ocean health" issues, including but not limited to the health of fishery stocks and threatened species and also human health/safety hazards that result from hurricanes, tsunamis, and other severe weather events, contaminated seafood, and poor quality air. More recently, it has become clear that human-induced and natural activities, including climate change, are affecting the health of U.S. Trust resources - marine mammals, endangered and threatened species, and coastal ecosystems - with alarming potential to harm humans as well. As the federal custodian of these resources, the public expects NOAA to manage them well, keep them healthy, and ensure that the people who use, eat or otherwise enjoy these resources do not get sick or die as a result of normal, responsible use. Increasing incidences of beach closures, fish and shellfish consumption advisories, harmful algal blooms, and occurrence of toxic chemicals and pathogenic microorganisms in coastal waters led the Congress to pass the Harmful Algal Bloom and Hypoxia Research and Control Act (HABHRCA) of 1998, the HABHRCA Amendments Act of 2004, and the Oceans and Human Health (OHH) Act of 2004. All of these established new authorities and requirements for NOAA to increase understanding through research and develop management, control, and mitigation strategies.

Within the OHH arena, Congress began appropriating funds to NOAA in FY03 with accompanying language directing NOAA to establish an OHH program to "coordinate and focus agency activities on critical areas of concern and identify critical gaps in coverage, and ... to be used for critical research and projects aimed at closing identified gaps." Congress has continued annual "ocean health initiative" appropriations to NOAA each year since, and in FY08 the program was first included in the President's Budget, albeit at a very low level (\$1M), as a formal NOAA program element.

Because it is now a formal part of NOAA's science portfolio, and because NOAA's National Ocean Service (NOS) has recognized ocean health as a major theme within its developing coastal priority, the NOS requested an opportunity to brief the NOAA Science Advisory Board (SAB) concerning NOAA's scientific efforts in the general area of oceans and health. This briefing was provided by Paul Sandifer and Geoff Scott of the NOS during the SAB's July 2008 meeting*. As a result of the briefing and discussion, the SAB agreed to establish a Working Group to evaluate NOAA's ocean health science efforts and their potential contributions to addressing ocean health issues in support of public safety and societal well being and provide scientific advice regarding these efforts to NOAA.

Charge to the Working Group

The Working Group will explore opportunities to enhance NOAA's ongoing ocean health efforts and their impacts on ecosystem and public health and well-being through

consideration of the following questions and any others that the WG may decide to entertain:

- 1) What are NOAA's unique and important scientific roles in addressing ocean health issues?
- 2) What are the right ocean health science questions, products and services for NOAA?
- 3) Are there additional ocean health science issues that should be included in the NOAA research portfolio? If so, what are these?
- 4) What are the appropriate steps for NOAA to incorporate and advance ocean health as part of its core mission?
- 5) How could NOAA more systematically develop ocean health products and services to enhance ecosystem, organism, human, and community health?
- 6) How can NOAA better integrate among its major programs, including activities conducted within the agency and those supported in the external community, to better define and assess ocean health issues?

Terms and Composition

The Working Group will consist of 8-10 members selected by the SAB, to include roughly at least two members from the SAB itself and up to eight experts from the external scientific community who are familiar with NOAA's ocean health activities.

Suggested timetable

The Oceans and Health Working Group will be established at the October 2008 meeting of the SAB and will carry out this review in approximately twelve months once convened. It will prepare a preliminary report of its analysis and findings within six months of its first meeting, with a target to present some initial draft recommendations to the SAB at its Spring 2009 meeting. A final report, including recommendations, will be completed within twelve months following its first meeting. The working group will be dissolved after completing any follow-on requests regarding the final report by the SAB.

Support

NOAA will cover travel and related costs for up to four meetings of the Working Group and any required teleconferences and will provide appropriate staff support for the panel as needed.

* NOS has indicated that the condition or *health* of coastal and ocean ecosystems reflects the ability of the ecosystems to continue to provide goods (e.g., fisheries) and services (e.g., waste treatment, storm protection) and maintain their integrity, diversity, and resiliency. Knowing and understanding the status (*health*) of ecosystems is an essential requirement for ecosystem-based management. In addition, ecosystem health affects the health of marine organisms for which NOAA has direct stewardship responsibilities, the health of people who are part of and exposed to coastal ecosystems, and the health of coastal communities and economies. This is a very broad definition of "ocean health" but the SAB agreed to address a narrower aspect of this focused on questions of human and organismal physiological health in the oceans and Great Lakes.