Science Advisory Board Nomination Package: Steven A Murawski

(1) The nominee's full name, title, institutional affiliation, and contact information Steven A. Murawski
Professor and Peter R. Betzer Endowed Chair
University of South Florida
College of Marine Science, MSL-118
140 7th Avenue South
St. Petersburg, FL 33701
smurawski@usf.edu
727-553-3367

(2) the nominee's area(s) of expertise

Fisheries science, marine ecosystem studies, applied statistics, ocean policy

(3) a short description of his/her qualifications relative to the kinds of advice being solicited

Dr. Murawski has extensive experience and familiarity with science and policy-related issues that bear on the achievement of NOAA's "wet-side" mission areas. In particular, these relate to NOAA Line Office priorities in fisheries, ocean research, data archival and ocean ecosystem management. As a former NOAA SES, he has interacted extensively with the NOAA SAB and understands their role and importance in formulating and prioritizing its science activities. Since leaving NOAA, Dr. Murawski has become intensively involved in recovery and restoration activities in the Gulf of Mexico Large Marine Ecosystem, and is involved with a number of activities involving NOAA and other federal agencies, the academic community and industries including oil/gas and fishing. His experience would be an important asset to the SAB.

(4) Inclusion of a (maximum length four [4] pages) resume or curriculum vitae is recommended, but not required.

(attached)

Curriculum Vitae

Steven A. Murawski, Ph.D.



Contact Information:

University of South Florida, College of Marine Science, 140 Seventh Avenue South, MSL 118, St. Petersburg, Florida, 33701, USA

Tel: 727-553-3367; smurawski@usf.edu

Professional Experience:

Research Professor and St. Petersburg Downtown - Peter Betzer Endowed Chair in Biological Oceanography. University of South Florida, College of Marine Science, St. Petersburg, Florida (January 2011 to present)

As a Professor, my duties are to develop and conduct an active program of research, teaching, collaboration, and professional development commensurate with the goals of the University. I am actively engaged in program development for integrated sciences across the St. Petersburg and Tampa campuses of the University. I am developing interdisciplinary programs and research investigating how activities such as recovery of the Gulf of Mexico marine ecosystem can be structured to achieve long term positive outcomes. I direct the Center for Integrated Modeling and Assessment (C-IMAGE) consortium, which is comprised of 12 member institutions investigating the impacts of the *Deepwater Horizon* oil spill, and is funded through an \$11 million, three year grant from the Gulf of Mexico Research Initiative (GoMRI). My research in this area includes impacts on disease frequency, growth and overlap with ichthyoplankton communities. My research in fisheries science includes developing new technological approaches to the assessment of resource status (reef fishes), which includes a towed camera system array (camera-based assessment system, C-BASS). My students are using novel techniques for understanding fishermen's behavior and choice and other research on marine protected areas. I continue to be involved in international fisheries and marine science activities, recently serving as vicepresident and USA delegate to the International Council for the Exploration of the Seas (ICES), and external advisor to the United Nations Food and Agriculture's Ecosystem Approaches to Management program in Africa. Additionally, I have recently been named by the National Academy of Sciences as a member of the US

Committee for the International Institute for Applied Systems Analysis (IIASA), and as a member of the Gulf of Mexico Fishery Management Council's Ecosystem Scientific and Statistical Committee.

Director of Scientific Programs and Chief Science Advisor, National Marine Fisheries Service, Informal Title: Chief Scientist 2005-2010 – Position: Federal Senior Executive Service (SES).

Duties: As Chief Scientist for the U.S. National Marine Fisheries Service, I was responsible for the development and implementation of national science programs for the agency. This included the policies and priorities for the use of science supporting the federal Magnuson Stevens Fishery Conservation and Management Reauthorization Act, the Endangered Species Act, the Marine Mammal Protection Act, and many other statutes requiring ecological science input for implementation of federal laws and statutes. Overall, I supervised 1,400 permanent employees and about 600 contractors, and executed an annual budget of \$450 million, organized into 25 laboratories within six regional Centers (Northeast to the western Pacific Islands). Our science capability utilized 11 ocean-going research vessels as well as numerous other infrastructure assets and technologies. In addition to these duties, I served as NOAA's Ecosystem Goal team lead from 2006-2012, which undertook strategic planning for the \$1.2 billion annual ecosystem-related portfolio of NOAA. I also participated in the development of the National Ocean Policy, culminating in an Executive Order by President Obama in 2009.

Director, Office of Science and Technology, NOAA Fisheries Service, Silver Spring Maryland, 2004-2005. I was responsible for domestic fisheries stock assessment and science issues, as well as chairing NOAA Fisheries' Science Board

Chief, Population Dynamics Branch, Northeast Fisheries Science Center, NOAA Fisheries Service, Woods Hole, Massachusetts, 1990-2004. I served as chief stock assessment scientist providing research necessary for managing fisheries in New England and the Middle Atlantic states.

Fishery Biologist, NOAA Fisheries Service, Northeast Fisheries Science Center, Sandy Hook, New Jersey, and Woods Hole, Massachusetts – 1976-1990. Stock assessment and ecosystem studies researcher providing information required to manage New England and Middle Atlantic fisheries.

Education:

Ph.D. 1984 - Department of Forestry and Wildlife Management, major: Fisheries and Wildlife Biology, University of Massachusetts- Amherst, dissertation title: *Simulating*

optimal harvest strategies for mixed-species trawl fisheries off the Northeast coast of the United States.

Awards:

Dwight A. Webster Memorial Award. American Fisheries Society, Northeastern Division. April, 2011. For: Meritorious/prestigious service to the profession and fisheries

Presidential Rank Award for Meritorious Service, United States Senior Executive Service, Conferred by President Barak Obama, October, 2009

U.S. Department of Commerce **GOLD Medal**, 2007, for: "Assisting in the passage of the 2006 Magnuson Stevens Fishery Conservation and Management Reauthorization Act, a major administration priority".

NOAA **BRONZE Medal** 2007, for "providing the vision and scientific and organizational leadership across NOAA to respond to devastating effects of hurricanes Katrina and Rita".

David Belding Award for Fishery Research and Conservation. Massachusetts Division of Marine Fisheries, December, 2004.

NOAA **BRONZE Medal**, 2003, for "developing new analytical techniques for computing biological reference points and developing adaptive management approaches for New England groundfish" September, 2003.

National Marine Fisheries Service, **Employee of the Year**, Northeast Fisheries Science Center, Management & Supervision Category. March, 2003.

Distinguished Alumni Award, 2003. Department of Natural Resource Conservation, University of Massachusetts, Amherst, Massachusetts, April, 2003.

NOAA BRONZE Medal, 1999, for "the rapid and successful implementation of a fishery management program of principle importance to the Agency".

NOAA **BRONZE** Medal, 1994, for "professional accomplishments in fishery population dynamics research".

Selected Recent Publications (full list of 163 available on request):

Murawski, S.A., Hogarth, W.T., Peebles, E.B., Stein, J.E., Ylitalo, G., Dickoff, W., Landsberg, J., Cody, T., Barbeiri, L. 2012. Prevalence of fish diseases in the Gulf of Mexico, post-*Deepwater Horizon*. SCIENCE (submitted).

Lubchenco, J., McNutt, M.K., Dreyfus, G., Murawski, S.A., D.M. Kennedy, D.M., Anastas, P.T., Chu, S., and Hunter, T. 2012. Science in support of the *Deepwater Horizon* response. Proceedings of the National Academy of Science (in press) pnas.1204729

McNutt, M.K., Chu, S., Lubchenco, J., Hunter, T., Dreyfus, G., Murawski, S., Kennedy, D.M. 2012. Applications of science and engineering to quantify and control the Deepwater Horizon oil spill. Proceedings of the National Academy of Science (in press) pnas.1204729

Murawski, S.A. 2011. Summing up Sendai: Progress in integrating climate change science and fisheries. ICES Journal of Marine Science, 68: 1368-1372.

Murawski, S.A. 2010. Rebuilding depleted fish stocks: the good, the bad, and, mostly, the ugly. ICES Journal of Marine Science, 67: 1830-1840.

Murawski, S. A., Steele, J. H., Taylor, P., Fogarty, M. J., Sissenwine, M. P., Ford, M., and Suchman, C. 2010. Why compare marine ecosystems? ICES Journal of Marine Science, 67: 1-9.

Levin, P.S., M.J. Fogarty, S.A. Murawski, D. Fluharty, and A. Smith. 2009. Integrated ecosystem assessments: Developing the scientific basis for ecosystembased management of the ocean. Public Library of Science (Biology) Volume 7: 23-28.

Brodziak, J., S.X. Cadrin, C.M. Legault and S.A. Murawski. 2008. Goals and strategies for rebuilding New England groundfish stocks. Fisheries Research 94: 355-366.

Murawski, S.A. 2007. Ten myths concerning ecosystem approaches to marine resource management. MARINE POLICY 31, 681-690.

Murawski, S.A., S.E. Wigley, M.P. Fogarty, P.J. Rago, and D.G. Mountain. 2005. Effort distribution and catch patterns adjacent to temperate MPAs. ICES Journal of Marine Science 62: 1150-1167.