The U.S. Shorebird Conservation Partnership

Building Collaborative Action for Shorebird Conservation

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2 September 2016

Mr. Eric Schrading, Supervisor
New Jersey Field Office
U.S. Fish and Wildlife Service
4 East Jimmie Leeds Road, Unit 4
Galloway, NJ 08205-4465

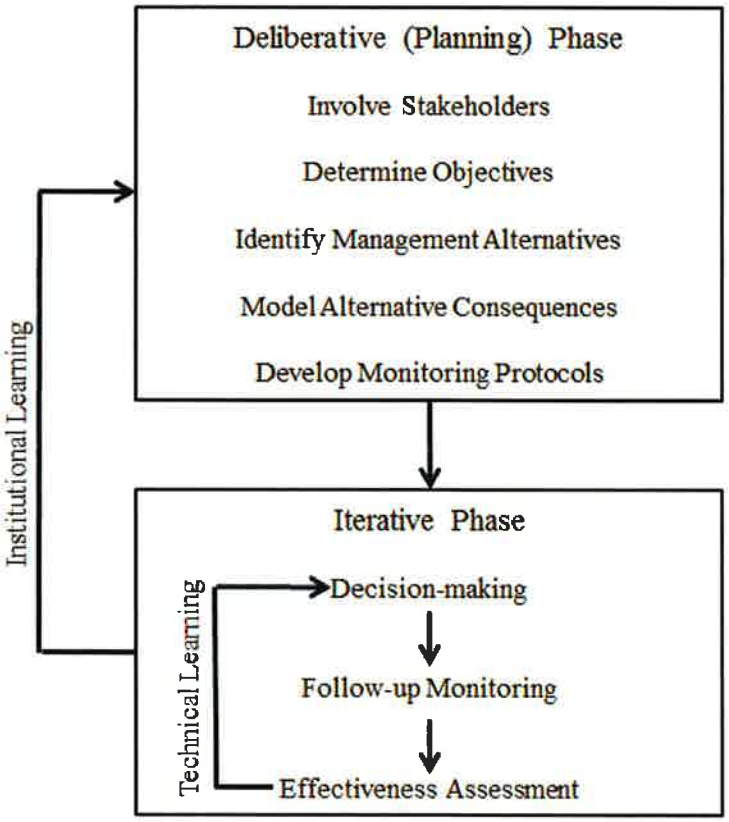
Dear Mr. Schrading:

In the U.S. Fish and Wildlife Service's (USFWS) recently released "Biological Opinion on the Effects of Existing and Expanded Structural Aquaculture of Native Bivalves in Delaware Bay, Middle and Lower Townships, Cape May County, New Jersey on the Federally Listed Red Knot (*Calidris canutus rufa*)", there is a binding provision for the New Jersey Department of Environmental Protection, New Jersey Department of Agriculture, U.S. Army Corps of Engineers, and the USFWS to implement an adaptive management approach for managing oyster culture in the action area. We are writing to you to encourage engagement in an adaptive management process and to offer assistance in its development and implementation.

The U. S. Shorebird Conservation Partnership (USSCP) and its Council is a collective of individuals and organizations who are expert in the long-term conservation of the Western Hemisphere's shorebirds. USSCP representatives have extensive experience in shorebird conservation and include federal agencies, state agencies, and non-governmental organizations. We work collaboratively to address shorebird conservation issues and propose solutions. Accordingly, we are interested in the fate of red knots that use Delaware Bay during their epic spring migration.

Adaptive Resource Management (ARM) and Structured Decision Making (SDM) processes have already been used to tackle complex natural resource management issues in Delaware Bay. Beginning in 2007, migratory bird and fisheries managers and biologists and other stakeholders initiated an ARM process to address management of horseshoe crabs and red knots (Delaware Bay Adaptive Resource Management Working Group 2009), which was endorsed and supported by the Atlantic States Marine Fisheries Commission. Building on the experience and success of this effort, we recommend that a similar process be initiated to manage Delaware Bay aquaculture and migratory shorebirds in New Jersey.

The National Research Council (2004) defines adaptive management as "… flexible decision-making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood. Careful monitoring of these outcomes both advances scientific understanding and helps adjust policies or operations as part of an iterative learning process". Based on this definition, Williams and Brown (2014) outlined a framework for implementing an effective ARM process. Their framework includes the essential elements needed to implement a two-phase process of planning and iterative decision-making that develops technical and institutional learning (see below). Actively addressing each element is needed to successfully implement an effective ARM process. Also crucial to successful ARM outcomes is the commitment to the process by organizations that have a stake in the management decision. In their paper, Williams and Brown (2014) cited the horseshoe crab – red knot framework initiated in Delaware Bay as an effective use of the ARM process.



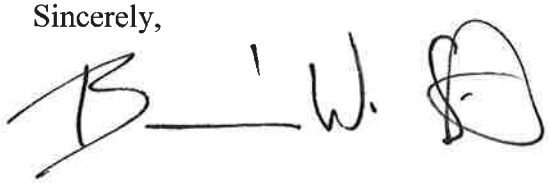
Development of an ARM approach can first be accomplished through a Structured Decision Making process to formally frame the decision problem. SDM is an organized approach to identify and evaluate creative options and make choices in complex decision situations (e.g., Hammond et al. 1999). SDM is designed to deliver insight to decision makers about how well their objectives may be satisfied by potential alternative courses of action. It helps find 'win-win' solutions across groups, clarifies the irreducible trade-offs that may exist between alternate potential courses of action and helps to communicate how people view these various options. Adding an iterative process to SDM leads to Adaptive Resource Management.

As noted in the Programmatic Biological Opinion PBO, the USFWS National Conservation Training Center (NCTC) provides training in SDM background and real problem applications. We encourage the USFWS and other stakeholders to take advantage of this training to address the management of structural aquaculture and migratory shorebirds in New Jersey's Delaware Bay shoreline. If the NCTC option is not feasible, then local training should be offered that follows the NCTC course.

The USSCP is committed to working with Delaware Bay stakeholders to pursue ways to initiate the SDM and ARM process. The past work with red knots was funded by the National Fish and Wildlife Foundation, the U.S. Fish and Wildlife Service, and the U.S. Geological Survey. We hope you will consider engaging in the ARM process to manage aquaculture in Delaware Bay within the context of migratory shorebird conservation.

We look forward to discussing how we can work with you to make this happen. Thank you for your consideration.

Sincerely,



Brian W. Smith, Chair
U.S. Shorebird Conservation Council

cc: Mr. Robert Martin, Commissioner, New Jersey Department of Environmental Protection, PO Box 402, Trenton, NJ, 08625-0402.

Mr. Douglas Fischer, Secretary, New Jersey Department of Agriculture, PO Box 330, Trenton, NJ, 08625-0330.

Mr. Dave Chanda, Director, New Jersey Division of Fish and Wildlife, Mail Code 501-03, PO Box 420, Trenton, NJ, 08625-0420.

Mr. Sam Reynolds, Acting Chief, Regulatory Branch, Philadelphia District, U. S. Army Corps of Engineers, 100 Penn Square East, Wanamaker Building, Philadelphia, PA, 19107

Literature Cited

Delaware Bay Adaptive Resource Management Working Group. 2009. A framework for adaptive management of horseshoe crab harvest in the Delaware Bay constrained by red knot conservation. Stock Assessment Report No. 09-02 (Supplement B), Atlantic States Marine Fisheries Commission, Arlington, VA.

Hammond, J. S., R. L. Keeney, and H. Raiffa. 1999. Smart choices. Broadway Books, New York, NY.

National Research Council. 2004. Adaptive management for water resources planning. National Academies Press, Washington, DC

Williams, B. K., and E. D. Brown. 2014. Adaptive management: From more talk to real action. Environmental Management 53:465–479.