

2013 Gilbert F. White Flood Policy Forum

Human Adjustments in Coasts- Adaptive Management In Response To Changing Hazards, Risks, and Ecosystems

Background
Draft 10-16-12

The nation's coastal floodplains face ever increasing and changing pressures. Population growth in the coastal zone; escalating demands on fisheries and other resources unique to the coast; discovery of resources that can fuel a nation; and ecosystems under stress from land use and river management strategies are not new challenges. However, what is new is the unprecedented growth of the United States population, coupled with a climate that has drastically changed in a handful of generations.

Current demands on constrained coastal resources are not sustainable. Even if human population, resource consumption, and climate trends stabilized at today's levels, evidence indicates that critical coastal functions could not be sustained. However, the mainstream science community acknowledges that populations in coastal regions are growing at a rapid clip, against the backdrop of a changing climate, and that the impacts of these trends are and will continue to be disruptive to lives, ecosystems, and economies.

To facilitate national policy discussions on important floodplain management issues, the ASFPM Foundation sponsors The Gilbert F. White Flood Policy Forum. The Forum is a gathering of leading experts in the field of flood policy and floodplain management. These Forums develop policy recommendations and establish an ongoing record of flood policy issues and directions for the future. The Forums have been named in honor of Gilbert F. White, the most influential floodplain management policy expert of the 20th century. The Forums are not only a tribute to his work, but also recognition of the success of his deliberative approach to policy analysis and research.

The goal of each Forum is to convene the top technical and policy strategists to examine a particular flood challenge, and to develop recommendations for policies that will reduce the human casualties, environmental impacts, and economic losses associated with flooding, as well as policies to protect and enhance the natural and beneficial functions of floodplains.

The Coastal Forum, by design, is linked to Gilbert F. White's 1942 dissertation *Human Adjustment to Floods*. In this groundbreaking work, Dr. White dramatically expanded the options available to deal with flooding from being that of purely controlling floods to that of also modifying practice or financial exposures in a manner that would allow humans to adjust to flooding impacts. Forum 2013 provides the opportunity to explore the management principles that should underlay a sound coastal flood risk management and coastal resource management strategy while at the same time begin to enumerate the policy, technology, data, and essential research necessary to implement such a strategy.

At the Forum, we will discuss the realistic, as opposed to optimal, planning scenario taking into account anticipated demographic and climate change. We will define for purposes of this policy the following:

- What do we mean by coastal zones, ecosystems, and floodplains?
- What are the primary coastal hazards and threats, including flood-related benefits and hazards, as well as the value of coastal natural functions?

- What are the likely outcomes and attendant risks and opportunities likely to face the United States, under the various anticipated coastal projections of population, investment in assets, and climate change?

Finally around these topics we will provide a near- and long-term action agenda related to:

- Policy
- Technology
- Data
- Essential research

As with every Gilbert F. White Flood Policy Forum, participation is by invitation and conditioned on the submittal of a policy brief addressing the Forum topic. For additional information or to nominate a participant, please contact Diane Brown, ASFPM, at diane@floods.org.

Background Reading:

Gilbert F. White, *Human Adjustment to Floods: A Geographical Approach to the Flood Problem in the United States*, available at http://www.colorado.edu/hazards/gfw/images/Human_Adj_Floods.pdf. Please note, this is a very large file.

National Oceanic and Atmospheric Administration's *State of the Coasts*, a web-based compendium coastal statistical data intended to foster an increased awareness of the crucial importance of healthy coastal ecosystems to a robust U.S. economy, a safe population, and a sustainable quality of life. Available at <http://stateofthecoast.noaa.gov/>.