Abstract: Under most circumstances, more frequent updating of stock assessments and minimizing the lag time in which fisheries dependent and independent data can be incorporated into the stock assessment will, in the long run, allow for higher annual catch limits. Stock assessment updating and reducing data management lags are costly. We use a management strategy evaluation to estimate the change in catch limits, and then deconstruct an economic analysis of the benefits of the different catch levels to see the impact each of the economic elements play in generating an economic benefits.

We apply this approach to the mid-Atlantic summer flounder fishery and simulate harvests from 2014-2040. We first use average price to obtain revenues, then add discounting, demand driven prices for revenues, industry profits, consumer surplus, and finally, recreational values. While it would be desirable to conduct similar analysis for all major species being assessed, this would be expensive and time consuming. The deconstructed analysis helps reveal factors indicative of returning the greatest value. For example, total revenues of a fishery are not as important of an indicator as demand elasticity is, since elasticity indicates to what extent fishery profits are sensitive to quota changes as well as impacts on consumers. Fisheries with major recreational components, where the species is a major direct target of recreational anglers, so other species are imperfect substitutes, would also yield large returns.

Biography: Doug Lipton is the Senior Scientist for Economics at NOAA Fisheries. Lipton started his career at NMFS Headquarters in the Office of Science and Technology as a fisheries biologist and then industry economist while obtaining his Ph.D. in Agricultural & Resource Economics (AREC) at the University of Maryland. He spent 25 years as a faculty member (now emeritus) in AREC at the University of Maryland and also was Program Leader for the Maryland Sea Grant Extension Program. He currently serves on the Mid-Atlantic Fisheries Management Council Scientific and Statistical Committee, is on the Board of Directors for the International Institute for Fisheries Economics and Trade and the Marine Resource Economics Foundation.