## United States Senate Commerce Subcommittee on Oceans, Atmosphere, Fisheries and Coast Guard – Hearing on reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act October 24, 2017

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Mr. Chairman and members of the committee, thank you for inviting me to testify before you today. For the record, I am Dr. Larry McKinney – Director of the Harte Research Institute (HRI) of Texas A&M University - Corpus Christi. HRI is a transdisciplinary organization with a focus on directed research and includes the Center for Sportfish Science and Conservation, uniquely focused on developing the foundational science for sustainable fisheries in the Gulf of Mexico. Before coming to HRI I managed saltwater fisheries for the state of Texas, so I have a management and science perspective, which is why I was asked to chair the working committee of The Morris-Deal Commission on Saltwater Recreational Fisheries Management. The commission was established in 2013 to provide a vision and framework for the modernization of Magnuson - Stevens Act (MSA) in its next reauthorization specifically to address pressing issues related to Sportfishing. The working committee brought together the very best policy, management and scientific expertise. These included a former director of the National Marine Fisheries Service, respected state and federal fisheries managers, leading academics, NGOs and industry leaders.

The report released by the Commission in 2014, *A Vision for Managing America's Saltwater Recreational Fisheries*, reflected that collective input and has received significant attention and more importantly, the ideas summarized there have had positive impact on federal fisheries policy. NOAA's National Marine Fisheries Service worked closely with the Morris - Deal Commission and in 2015 adopted a National Saltwater Recreational Fisheries Policy, acknowledging Morris –Deal, as the impetus for its development. NOAA Fisheries is also addressing other Commission recommendations as reflected in a recent *Progress Update: A Vision for Managing America's Saltwater Fisheries*. These are welcome efforts but further progress is limited by current legislation. We have the science-based tools with which to manage our recreational fisheries, but lack the legislative framework within which we can apply them.

The Commission and I hope that any reauthorization of MSA will focus on this issue specifically as it relates to recreational fisheries, the single largest component of our nation's fisheries not yet specifically addressed by our most important federal fisheries legislation. Securing the economic health, sustainability, and access to the most economically significant fisheries sector is achievable, but legislation should provide for and encourage application of long-established and successful science-based tools well known to fisheries managers and scientists.

Management of recreationally based fisheries cannot be accomplished by modifying management tools largely developed for commercial fisheries. My point is not to diminish the importance of commercial fisheries nor the effective management tools now in place because of the MSA, which have been key to assuring their sustainable future. My request is that recreational fisheries have their own similarly effective and appropriate federal framework to assure their future. That framework is not in the current one-size-fits-all fisheries management paradigm to which we are now confined. I suggest that the means to do so resides within the Commission's Vision Report. Some key recommendations from the report include the following:

## **Recreational fisheries cannot be managed by quota-based, annual catch limit approaches**. That may work well and successfully for commercial fisheries, but access-based management approaches, such as practiced by states successfully managing recreational fisheries, should be a federal focus. Recreational fish should be managed, not as a commodity, but as a natural resource belonging to all Americans and accessible by all Americans. Unlike commercial fisheries, recreational anglers do not seek to maximize pounds landed but the opportunity to fish for a range of mostly non-consumptive reasons. Fisheries managers in the Atlantic striped bass fishery successfully employed the strategy of using long-term harvest rates, rather than strict poundage-based quotas, to successfully manage the most sought-after saltwater recreational fishery fish in the nation. Using this access-based approach, fisheries managers in states like Texas and Florida have been able to provide predictability in regulations, sustain a healthy population, and ensure broad access.

Perhaps the best example of this success is the restoration of Red Drum and Spotted Seatrout in Texas. These species were severely overfished by the commercial fishery through the mid-1970's. The Coastal Fisheries Division of Texas Parks and Wildlife Department launched a robust monitoring program in 1975. This program covered four million acres of Texas bays and out to nine nautical miles offshore, with joint federal management out to two hundred nautical miles. Some 900,000 recreational anglers and 1,700 commercial fishers were surveyed, including a 1,000 creel survey-days and 19,000 interviews. Over 780 gill net sets, 1,680 bay trawls, 1,200 oyster dredges and 2,160 bag seines were used to gather the fisheries independent data. The forty-two years of continuous data collection is the longest record of its kind in the world. A combination of legislative and regulatory actions fully recovered those species (see Figure 1 and 2, attached) with the support of an active and engaged angling public.

The program also allowed for the successful implementation of a commercial fishing license buy-back program. Through the 2014 license year, \$14.2 million was spent to purchase and retire 2,145 commercial Bay and/or Bait Shrimp Boat licenses. This represents 66% of the original 3,231 licenses grandfathered into the fishery in 1995. Additionally, \$1.8 million has been spent purchasing 63 Commercial Crab Fisherman's licenses and 241 Commercial Finfish Fisherman's licenses, retiring 22% and 44% of the licenses respectively.

We need reasonable latitude in stock rebuilding timelines. Magnuson – Stevens does not currently allow for this consideration. The National Research Council, a part of the National Academy of Sciences, Engineering and Medicine, reached the same conclusion in their report – *Evaluating the Effectiveness of Fish Stock Rebuilding Plans in the United States*. They found that rebuilding plans based on monitoring and controlling fishing levels, rather than requiring fish populations to recover to a pre-specified target size within a certain timeframe, would be less disruptive to the fisheries and less subject to uncertainty.

**Magnuson – Stevens should address and facilitate regional and cooperative management.** Not all recreational species, often found in both state and in federal waters, can be managed as a single population, yet that is often the case for federal management. Red snapper in the Gulf of Mexico is an example where such an approach is sorely needed. Flexibility to meet differing regional angler needs, as well as, ecological and biological subtitles across large geographic reaches is essential. It can be complex and take more effort but the resource and economic benefits far outweigh the costs. Reauthorization should be explicit in providing for and encouraging cooperative management on a regional basis. Some of the very best and most successful fisheries management expertise lies within state agencies; that expertise is not accessed given the current management system. Integrated into the federal management process through truly cooperative management, they bring expertise, resources and credibility.

**Economic Data in Allocation of Mixed Fisheries**. MSA reauthorization must provide the framework to assure that where mixed fisheries exist, managers use not only the best available science but also data-driven economic information to assure their sustainable future and equitable allocation. Reauthorization should clearly mandate this approach to eliminate ambiguity in the existing legislation.

Stock Assessments are in need of Improvement. The most fundamental science-based tool for fisheries management is a robust stock assessment, including both fisheries dependent and independent data. This is not an area where reauthorization is necessary unless there is a desire to be prescriptive in the structure of this process. Considering the diversity of fish stocks, that likely would not be a wise course of action. We can certainly improve these assessments and there are considerable scholarly recommendations, such as the National Research Council's Improving Fish Stock Assessments. Stock assessments are the principal tool we use to gauge the health and productivity of a particular fish population. Management advice hinges on the frequency and robustness of these assessments. The issue is not a question of science. I believe we know well enough what to do. The question resides in policy and resources available. Currently, in the South Atlantic region, for example, the number and frequency of assessments are astonishingly low when compared to other regions, obviously hindering the decision making process. The driving factors behind the turn-around time for assessments, whether it personnel, data, or other resources can be complex; however, as pointed out by several independent review groups, this is an area that should be addressed and drastically improved. There are, as a general rule of thumb, never enough resources to carry out all the stock assessments needed, nor frequently enough to adequately support management needs. NOAA Fisheries' policy decisions on where and when to allocate its limited funding would benefit from review and revision.

**Building a Science Base for Fisheries Management Decisions.** For me, a defining example of the different motivations between recreational and commercial fisheries occurred when I was the head of fisheries for Texas. Our data showed that because of a successful recovery effort we could increase the daily bag limit of Red Drum from three to four fish. Texas anglers were loud and clear about that proposal - a resounding no. Even if the data says we can, leave it alone, was their message. The bag limit remains at three to this day. Anglers simply want reasonable accesss and quality fishing, not maximizing their take. An involved and educated recreational angling community generated that response. Anglers who have access to--and trust in--their fishery

management agency (and the data on which they transparently operate) are allies for conservation, not opponents. We need this for our federal recreational fisheries management. Incorporating the ideas I have briefly summarized can make that a reality for federal fisheries. Thank you for the opportunity to provide this brief testimony, and I am certainly happy to answer any questions.

## **Figures**



Figure 1. A brief graphic history of the management of red Drum in Texas. Figure courtesy of Coastal Fisheries Division – Texas Parks and Wildlife Department. The combination of legislative and regulatory actions were all predicated on a robust monitoring program, including both fisheries dependent and independent data



Figure 2. A brief graphic history of the management of Spotted Seatrout in Texas. Figure courtesy of Coastal Fisheries Division – Texas Parks and Wildlife Department. The combination of legislative and regulatory actions were all predicated on a robust monitoring program, including both fisheries dependent and independent data