To give you a report on the status of recreational fisheries in southern New Jersey, I would report the following:

My marina, the largest in New Jersey has about 20% slip vacancy with boats staying in the water for shorter periods of time. Many fewer people fishing compared to previous years. Catch of striped bass (90% decrease), drum (50% decrease), fluke (70% decrease) all less than previous several years. Sea bass catch good but many boats running 20-30 miles. Almost no scup caught in south Jersey. Regulatory compliance not good.

I would like to submit the following comments which I believe are at the crux of our inability to rebuild the summer flounder population

1. As I have previously mentioned, we need to manage E-W migrating stocks differently then we do N-S migrating stocks. For a species that migrates N-S, it makes little difference where on its migratory pathway it is harvested. The same is not true for an E-W migratory species. Here over harvest in one area can cause localized depletion in the area off of a group of states.

A prime example of this problem is the shift of the epicenter of the fluke population over 60 miles to the north in the last several decades, a shift too great to be explained by the few tenths of degree of ocean warmth that has occurred in that same time frame. The commercial fleet from the southern states , holding nearly 50% of the commercial quota, has caused depletion of their own fluke stocks and now must fish hundreds of miles to the north to fill their quotas, causing the epicenter of the fluke stock to shift further and further north.

Magnuson demands that we provide equitable resource to all components of the fishing industry. The failure to put restrictions on regional harvest will inevitably continue to worsen regional stock depletion. Commercial overexploitation, particularly in the winter months, will cause localized depletions for the recreational fleets dependent on the inshore migration of those fish.

2. We need to rethink the basics of our fish stock parameters and cease considering that a pound of fish of one sex (and its state of fecundity) hold the same parity status of a pound in a dissimilar status. I recommend and have sent such recommendation to our SSC, that we come up with a reproductive efficiency model (REM) for harvesting parameters. With our stock knowledge, complex fish formulas, and computer capabilities, we can surely come up with better formulas to consider fish at different sizes, sexes, and reproductive status as having different worth for replenishing the stock. Reduced pressure on spawning stocks is ever so important when a stock nears an over fished status. Regulating fisheries on a poundage basis alone is an archaic system that needs revamping.

The entirety of the recreational catch and a majority of the commercial catch targets the potential spawning population. With a stock averaging low recruitments and declining SSB, continued exploitation of the component of the stock (spawning females) that is best capable of restoring the stock, is a very bad management practice.

Another example occurs in the commercial fishery where more and more of the quota is caught

in the fall-winter spawning season (80% of quota caught between Sept-April). A harvest of a million pounds of spawning females is far more detrimental to the stock then a harvest of a million pounds of post spawning females. Both regional and temporal regulation is desperately needed to allow stock replenishment. Area closures and regional closures should occur to allow the SSB to spawn successfully. Regional closures should occur in the southern range of the species and the hard hit midAtlantic wintering areas. Temporal closures should occur when the stock is spawning in that time frame in that locale.

By restricting catch on the spawning group, in essence, we increase the SSB. For example, if the average fluke lives long enough to spawn 5 times, and we allow it to spawn 6 times, we have mathematically increased the SSB by 16.%!

3. We need to examine how our regulations interact to the detriment of the fisheries and the stock.

I consider the following model to think about this process. I picture a bucket with four holes in the bottom to show the status of our fishery.

At the top is a funnel feeding the bucket.....The size of the funnel openings is reflective of the SSB and recruitment

a. One hole in the bottom is M, the natural mortality of members of the stock caused by natural mortality and predation. Not paying attention to commingled predators (like dogfish) can effect the size of this hole.

b. The second hole is F, our regulations hole effected by size, season, and bag limits.

c. The third hole is loss of fish due to discards, effected by the same parameters above, along with other factors like closed seasons, high grading, wasteful practices, small hook size, etc

d. The fourth hole is fish loss by illegal fishing.

This problem with these "holes" is that by changing one hole size, other hole sizes are changed, sometimes in a way which we know exists but don't attempt, or don't accurately know how, to add to our fisheries formulas.

For example, we know if we increase the size limit, we will increase the discard loss. In the recreational fishery, many fishermen go home empty handed having caused a large discard loss while retaining few to any fish. The consequence of such management is we stay within Magnuson parameters but provide little incentive to the recreational fishing industry.

A second example, is the tighter the restriction in size and quota, the more illegal fisheries will occur. I liken this to the gun control debate where only criminals will have guns if regulations are not crafted carefully. My own observations, fishing for fluke for over 40 years, is that anglers have gone from almost always compliant (since regulations began in 1989) to less then 20% compliant now. As Dr. Bill Holgarth, former NOAA head said to me, "If we make the

regulations too restrictive, people won't follow them." We know this problem exists and I know the monitoring committee tries to compensate for this, but I think we need to put this in our fishery calculations. I suggest the NEFSC, or other agencies contract a study on this problem so that we can have a formulation to consider when setting quotas and size limits. I fear what we think we are accomplishing by tightening regulations may be accomplishing just the opposite.

4. We need to make high grading an illegal practice in the recreational and commercial industries

An example of this occurs in the commercial fishery where the larger fish, worth more per pound, are kept, with legal size fish being discarded. Additional tows result in more fish kill when the allowed poundage quota could have already been filled.

5. We should stop trying to manage our recreational fisheries on an annual basis

Recent data shows wide ranges in recreational harvest despite changes in bag, size, and season limits. While each change should help, our data shows we may be accomplishing little. Our current data collection methods are so poor that we should only look at them over a time frame of several years at a minimum. Our SSC struggles with time constraints on data input trying to come up with recommendations on an annual basis further complicating annual regulatory changes.

Our fisheries sorely need a more consistent quota on a yearly basis instead of such drastic swings from year to year. If the federal reserve changed interest rates the same as we change fishery quotas, the worlds economies would be in shambles. Our fisheries are a smaller microcosm of the same type of process and much harm is done by this lack of consistency.

6. Stop regionalized conservation equivalency

The disparity of size and density of the fluke population, and its ever shifting status, creates unnecessary damaging effect to our recreational fleets by cojoining states as a single region. Just as we realized a coastwide equivalency formulation is neither fair nor appropriate, so to is joining states for regulatory purposes when the regions stock status is nonuniform.

7. States appropriate recreational quotas

I would argue that a states recreational fluke quota should be based on the current effort of that state's fishing population. The current system based on 1998 quotas is outdated and unfair. My suggestion would be to use the number of registered recreational private and charter boats along with the number of registered saltwater anglers who pursue that species. A simple and easy to obtain piece of data is to ask anglers what species of fish they fish for and how often, when they complete their annual recreational saltwater registry. Quotas would then be allocated to states based on the number of party and charter boats (capacity/day) combined with the number of recreational anglers fishing for that species in that state. This type of system would result in a fair allocation of the resource to the angling public.

8. Institute slot parameters in our fluke FMP.

Our federal regulations should allow for slot sizes, not just the current minimum size limits. Our recreational fisheries would function much better under such a program where more breeders would be spared and angler could fish more heavily on the male component of the stock.

9. We need to pay attention to how our fishery regulations impact one another.

An example occurs in the recreational industry in our area. When we close fluke fishing in September, we concurrently have federal waters sea bass in a closed status as well. In southern New Jersey where I fish, there is a two month season where charter and private boats sit at the dock with a vast downturn in all fishery related businesses in the area.

Sea bass recommendations

1. I would recommend that the recreational catch be a male only catch. With studies showing the relative unimportance of super males in procreation for this species, harvest should be directed for those members, preserving the more important females and subordinate males.

2. I would recommend requiring recreational venting or other techniques when fishing in water over 75 feet when returning sea bass. Many fish are seen floating around recreational fleets in deep water.

3. I would eliminate the federal waters closure on sea bass currently between 9/21 and 10/22. With fluke closed then, there is little for the recreational fleet to go for.

Research studies proposed for fluke

1. Do additional studies on what slot size parameters would be most effective for the recreational fleet.

2. Do additional studies on prime spawning periods in different latitudes to consider seasonal closure of areas during the winter months.

3. Do additional tagging studies to document inshore-offshore fluke migration patterns to consider spatial closures so as not to cause spatial depletions of our fluke populations.

4. Do studies to try and reduce mortality on discards

a. hook size and type recreational fleet
b. methodology to reduce 80% dead discard rate in the commercial fishery...net modifications, shorter tow times, methodology to reduce crushing of fish when net pulled out of the water.

5. Do studies to consider how other fisheries (scallop, sea bass, skate) impact the discard rate for fluke.

6. Data is much needed to understand how our regulatory constraints contribute to the illegal fisheries. What parameters contribute most to increasing the illegal catch.....Size limit, seasonal closures, ever changing regulations, lack of confidence in our fisheries management, lack of knowledge, poor dissemination of state regulations, etc.

7. Studies that may help us understand why our fluke stock is not rebuilding despite ever decreasing quotas

Research studies for sea bass

1. Is a federally closed season, from late Sept till late October, effecting local fisheries economics and is it at all beneficial

2. How would a male directed fishery effect the stock

3. How to reduce tremendous dead discard rate in the commercial fishery as it trends away from a pot based fishery.

4. Ways to improve potting of sea bass