I. Big Ideas that need significant new funds

1) (Otwell): National Sea Grant - International Perspectives (IP's) - Sea Grant should initiate structured and assigned International Perspective (IP) programs on specific topics (e.g., Responsible Seafood/ Aquaculture Product Integration in US Commerce; Mutual Climatic Interventions; etc...). The approach should encourage mutual benefits and 'shared' cost with international 'partner' programs.

1 a.) Comparative evaluation of large scale marine algal production.

Farming of seaweeds presents a long term sustainable mechanism to address two compelling environmental issues of the next century with the potential to improve coastal water quality and reduce atmospheric CO_2, while generating employment, and producing food, fiber and food ingredients. A special Sea Grant competitive initiative to conduct a comparative evaluation of large scale seaweed production in different coastal regions of the country could act as a catalyst for a new "green" industry.

Coastal waters throughout the nation are polluted with excessive nutrients from human activities and seaweed culture of appropriate scale could remove a large percentage of these nutrients. Ocean acidification is one of the most alarming aspects of climate change and recently the pH of upwelled waters off the coast of Oregon was found to be close to the threshold at which animals will be unable to sequester calcium carbonate for the creation of shell material. This upwelled water has not been in contact with the atmosphere in 50 years and thus, the impacts of the last 50 years of industrialization have yet to surface, but they are in the pipeline of oceanic circulation. Removal of CO_2 through the culture and harvest of seaweeds could lessen the current impact of industrial practices and help mitigate those of the past. Large scale seaweed production would provide tremendous employment opportunities for displaced fishermen using their vessel handling skills, and for shore based support industries that would be needed for required handling, processing and marketing of products.

Resource economists could be engaged to evaluate the economics of large scale seaweed culture, factoring in the environmental services such activities would generate. A national Sea Grant initiative as described would involve a collaboration between Sea Grant scientists, extension specialists and many constituents in coastal communities throughout the U.S. Noted aquaculture consultant, John Forster, extrapolating from Chinese yields calculated that that by cultivating less than 2% of the oceans' surface, seaweed farms could produce a biomass amount equal to that of all food crops farmed on land. Ancillary benefits would be to lessen future agriculture demands for finite fresh water, reduce conversion of terrestrial wild lands to agriculture, and creation of unique habitat for marine flora and fauna. As Jacque Cousteau said in 1973, "With Earth's burgeoning populations to feed we must turn to the sea with new technology and new understanding. We must farm it as we farm the land."

II. Ideas that could be accomplished with new resources under existing budget

2) (Sylvia): Conduct a national seafood consumer survey every three/five years identifying consumer, needs, behavior, and knowledge. The survey would be valuable for developing a national baseline and benchmarks for measuring changes in consumer knowledge, perceptions and behaviors. Analyze and report on the survey in a special forum. Use the results to develop Sea grant programs and benchmark Sea Grant success.

3) (Sylvia): A national SG and joint USDA Conference on strategic aquaculture economics, policy, and management. In particular focus on the interactions of fisheries and aquaculture given growing overlap in management, policy, production, marketing, biology-ecology. Some dollars could support economic-industry research/surveys with a Conference proceedings/recommendations for improving management and policy. Results could be used to guide regional and state Sea Grant programs.

(4) Sylvia): Research analysis and conference on LAPPS and rights based management. In particular evaluate LAPP's with respect to sustainable seafood through the larger governance context, which is changing and broadening. The project could evaluate LAPPs in terms of their flexibility and adaptability to ecosystem-based fishery management, self governance, ocean zoning and climate change. It could look at the range of LAPP structures, from individual to co-op to communities. Results would be presented in a special conference and outreach materials developed for Sea grant education programs.

5) Sylvia: ecosystem-based fishery management: research, conference, educational programs assisting states, feds, industry, and NGO's on implementing ecosystem management including valuing ecosystem services;

6) Sylvia: fishery-based working waterfronts: research, conference and publication materials on innovative approaches, case studies, and new "tool boxes" for supporting/saving fishery infrastructure and working waterfronts; develop outreach materials and engagement strategies consistent with growing state/national policies

7) (Sylvia): integrative fishery information systems: develop integrative fishery and science information systems using websites, electronic logbooks/dataloggers, and traceability system to integrate/improve science, fishery management/economic performance, and marketing. Conduct pilot projects and support national conference and national outreach education effort.

8) (Otwell): National Sea Grant - Master Core Programs (MC's) - The core of Sea Grant extension expertise or marine advisory components needs to build a network or accompanying cadre of talent to assist our efforts. A proven model is the Master Gardeners Program that has fostered a national following with additional funds and various self-sustaining financial programs. I envision a national collaboration of Sea

Grant expertise developing, maintaining and delivering various ‘core’ curricula as the educational foundation supported by science, publications, websites, virtual internet communications, etc... to yield a cadre of ‘recognized’ experts (Masters of Seafood or Masters of Marine Fisheries, etc…) that would assist and complement our Sea Grant programs across regional and national programs.

9) (Morse): Consumer education program - Of the relatively little seafood that US consumers eat, much is chosen on the basis of price: though I don't have specific studies to cite, I think that is a true statement. Yet, we continually hear about poor product quality originating from outside the US (or dangerous product), all the while US capture fisheries and aquaculture producers do their best to adhere to some of the most stringent management and production criteria in the world. Can we create a product/forum/advertising or educational program or some other vehicle to make the case to consumers that when you buy American, not only are you helping domestic entities, you are acting in the best interests of your health?

10) (Smith): Create an independent "Safe, Sustainable Seafood Sea Grant Expert Center". This would be a place (virtual or real, that is at a Sea Grant program) where a group of people (the team or a 'steering committee' subset) would develop a RFP which summarizes the current topics and priorities of the team and solicits say two-year proposals which would regionally deal with a topic. The 'Center' would draft the RFP, circulate it, use a technical review process and select a set of proposals for funding.

11) (Smith): Safe Sustainable Seafood Council Outreach - This is an outreach (communication and education) project which will utilize the expertise and knowledge of the Sea Grant network in seafood and fisheries related work to communicate regularly with the MSFCMA-authorized regional fishery management councils (FMC). This proposal provides a mechanism for current and relevant Sea Grant fisheries research and outreach to be brought before the Council so that they are better informed about topical issues.

12) (DuPaul): Sustenance Fishing (one that sustains life or health; especially, food). Sea Grant may be in a particularly unique position to evaluate the degree and extent of sustenance fishing as it relates to fishery management, the importance of fishery stocks in contributing to another aspect of society that is sometime ignored and to what part of "recreational fishing" is really an effort to feed families and not to recreate. As the economies of the US and world take a bad tumble, is sustenance fishing going to be an issue that needs a better assessment and does it have a legitimate role in setting fishery management objectives.

13) (DuPaul); I still favor some action relating to fishery bycatch, discards, and of course interactions with protected species. Sea Grant does good work here either from the point of gear modifications or developing new management and fishing strategies with the fishing community.

14) (Schmitten): US hosts (Joint SeaGrant and NOAA Fisheries) a international symposium on Safe and Sustainable Fisheries/ ITQ systems/ lessons learned and transferable. It would have some cost; just guessing but a major international symposium with invited speakers would probably run $150-200K but my recollection on costs is getting dated.

III. Possible Activities 2009*

1) Serve as a steering committee for the biennial Sea Grant/NMFS sponsored symposium at the annual meeting of the American Fisheries Society, Sept. 2009.

2) Send a dear colleague letter to the Sea Grant networks (SGA, Assembly, educators, communicators, etc.) that describes the proposed activities of the focus team and invites their input and collaboration. Ask if individuals would like to be added to the listserv or have ideas or request for actions by the team.

3) Organize and sponsor a national symposium on coping with high energy costs for the fishing and aquaculture industries. The symposium would address innovative harvesting, gear, engine and management approaches to reducing energy costs and would include international participants.

4) Collaborate with NMFS and USDA to conduct Sea Grant network inreach (capacity building) training programs in fisheries and aquaculture, and seafood/aquaculture safety.

5) When available, mine the ideas and priorities of the regional research and information plans as a needs assessment to help us determine activities and align our plans with the priorities of the regions.

6) Organize a meeting of the regional research and information plan PIs and the focus team chairs and vice-chairs to facilitate needed linkages.

7) Consider funding a part-time graduate student at LSU to staff our focus team. This graduate student would have responsibility for helping the team write impact and success stories from the annual reports.

8) Determine baseline measures (what and how to measure) and translate these measures into practical actions for Sea Grant programs, including conducting initial measurements.

9) Through the USDA/CSREES research group known as W1004 "Economics and Marketing of Seafood," partner with USDA on strategic initiatives identified in its

five year plan.

10) Participate in established forums and key organizational meetings with a particular Sea Grant presence to advance and encourage cooperation with the SSST process and concepts.