Summary of the
Aquaculture Amendment Public Hearing
Houston, Texas
December 10, 2007

Council and Staff:
Joe Hendrix
Wayne Swingle
Karen Hoak

The hearing was called to order by Chairman **Joe Hendrix** at 6:00 p.m. at the Hilton Hobby Airport. **Wayne Swingle** gave a presentation on Aquaculture Amendment. Thereafter the public was invited to speak. There were 25 members of the public in attendance. The 16 participants listed below offered testimony and the participants' common concerns and comments were consolidated and summarized as follows:

Participants' comments opposing the amendment:

- What economic impact the plan would have on coastal communities and whether aquaculture would be feasible for small family farmers. Industrial/corporate farms could harm the economies of coastal communities.
- Potential degradation of the marine environment.
- There was a common perception that the amendment was being fast-tracked. Creating a beneficial aquaculture industry for the nation would require enacting carefully considered and exacting management measures.
- Gulf clutter. There are oil rigs, pipelines, LNG facilities already in the Gulf, coupled with these proposed new pieces of equipment with tankers and other vessels trying to navigate around everything.
- The use of oil rigs being used as farms. Many believed this could pose a health threat due to contaminants found in the drilling fluids.
- What the impact of aquaculture would be on commercial fishermen and market prices.
- The lack of available data.
- Why 70% of nation's catch is exported while Americans consume such high quantities of imported fish.
- Enforcement and oversight, including lack of personnel and funding.
- Public resources being used for the primary benefit of private corporations.
- Superfund clean-up funding.
- Lax aquaculture regulations causing negative consequences for shrimpers.
- Increasing protein production could be accomplished by increasing EFH areas. Give fish adequate habitat and they will flourish.
- Commercial operations tend to generate large amounts of pollution.
- Being restricted in accessing popular fishing areas.
- Strong market controls would be vital to success.
- Farmed fish spreading diseases to wild stocks.

- Environmental issues such as concentrated excrement and feed contaminating surrounding sealife and polluting their habitats as well as concerns about red tide.
- The global environment, jellyfish swarms, super hurricanes, dead zones from nutrient dumping, etc., and the accompanying devastation.
- A large depletion of menhaden in order to provide feed to the farm.
- Habitat protection.
- Antibiotics, growth hormones and other feed additives that may present health issues.

Participants' comments supporting the amendment:

- The Aquaculture industry was frustrated by lack of development of this industry, particularly in Texas, where a lot of fish were consumed. Excessive regulation was prohibitive to fish farming. It took 15 years for regulations to allow for human consumption of farmed striped bass. To expand fish farming, regulations would have to be held to a manageable level.
- Depleted wild stocks would benefit from aquaculture since farming would reduce pressure on wild stocks, allowing more plentiful and mature wild fish to repopulate the oceans.
- Rising land prices were making land-based fish farming more prohibitive. Competition between cities for fresh water was hurting land based aquaculture businesses.
- Aquaculture facilities currently in operation could benefit by being able to expand their business into the open ocean.
- Anglers and environmentalists alike have the opportunity to offer their input on this amendment to ensure appropriate measures are implemented to manage the resource.
- Safe feeding practices to ensure good water quality would be a major concern to the operators of a U.S. based aquaculture industry. This was not necessarily true for foreign businesses. Our country has much stiffer regulations.
- Aquaculture, properly managed, could create enormous potential for new jobs.
- Fish is very healthy, rich with omega 3. It reduces the risk of strokes and heart attacks and is also very beneficial for combating Alzheimer's.
- Land based feed fed to farm raised fish could eliminate the mercury problem in fish allowing for more fish to be consumed, which would further stimulate the industry.
- Finding new ways to feed the ever increasing population is necessary. Marine resources are a major source of protein for humans.
- Successful fishermen co-ops had been achieved in other countries such as in Greece and Japan. The Mediterranean had similar circumstances to the Gulf fishery 20 years ago until the European Union created aquaculture programs for sea bass and sea bream. That created a 1 billion dollar gross industry while it maintained or created 35,000 jobs.

Meg Boyle spoke against the amendment on behalf of Food and Water Watch, a national consumer advocacy organization.

Juan Parras spoke representing Clean Citizens' League for Environmental Rationale and a board member of the Gulf Restoration Network. He spoke against the amendment

Jim Ekstrom, owner of Silver Streak Bass Company and a representative of Texas Aquaculture Association spoke in favor of the amendment.

Fr. Sinclare/Maxie Ngo read and submitted a statement (attached) on behalf of the Port Arthur Area Shrimpers' Association. They spoke against the amendment.

Page Williams, member of the Houston Underwater Club, the Marine Wildlife and Habitat Committee of the National Sierra Club, and the Gulf Restoration Network read and submitted written comments (attached). She spoke against the amendment.

Ellis Picket, member of the Surfrider Foundation/Texas Chapter and recreational scuba diver. He recommended that great caution be exercised if proceeding.

Katherine Smith commented on behalf of Food and Water Watch. She spoke against the amendment.

Sharron Stewart represented the Galveston Bay Foundation and spoke against the amendment or proceeding with extreme caution.

Dr. Phillip Lee, a professor at UT medical branch, spoke as a marine aquaculture participant for the over 30 years. He spoke in favor of aquaculture. He witnessed at least one hundred aquaculture facilities in 6 continents. Many were well run, while others he considered "pitiful." Along with making other comments, he specifically addressed Action items in the amendment. His comments are summarized as follows:

On Action item 3 on assurance bonds, he stated that requiring them for aquaculture businesses would be discriminatory since commercial fishermen and oil companies do not require assurance bonds. After Katrina, the taxpayers picked up the tab for boat and debris cleanup, not the boat owners. Also, regarding environmental monitoring, he wondered whether state and federal hatcheries along the coast would be required to meet the same standards.

On Action item 4, he did not support the Council's preferred alternative which restricted growing corals. He preferred that they allow all native species.

On Action item 5, the preferred alternative gave NOAA the authority to review the growout systems. He wondered where the expertise existed within NOAA for that duty.

On Action 8, recordkeeping and reporting, he wanted a section on administrative process review to ensure that permit applicants got due process of law.

John Ericsson represented the Gulf Marine Institute of Technology. He noted that 45% of all fish food consumed was provided by the worldwide mariculture industry. However, only 1% of that fish was farmed in the United States. America is the second largest importer of seafood in the world. He believed that this imbalance was caused by regulatory issues and environmental concerns. He was both an environmentalist and a promoter of aquaculture and encouraged further development of the document.

Paul Dorsett representing the Texas Aquaculture Association concurred with the other supporters and spoke in favor of the amendment.

Geoffrey Castro of the Clean Citizens League for Environmental Action Now read and submitted a prepared statement (attached) outlining his organization's concerns.

Tom Hilton, spoke as an owner of a company that does research, manufacture, and deployment of artificial reefs (realtime-navagator.com). He recommended that the Council take a slower course in order to obtain the further public suggestions on environmental matters.

Evelyn Merz, spoke as a Houston resident and environmentalist. She commented that near/on shore aquaculture and off-shore aquaculture were very different. There was much less control in the open ocean as opposed to pond or near-shore farming. She spoke against aquaculture.

Ella Tyler of the Citizens Environmental Coalition spoke on her own behalf. She noted that while contemplating all of this, one should consider that while the Gulf is relatively small, the Gulfstream and its reach was not, which could spread pollution as far as Bermuda. She spoke against aquaculture.

Jerrilyn Halbert spoke as a Houston native and private individual. She spoke against aquaculture.

Joe Hendrix addressed the comments pertaining to the amendment as being fast-tracked. He stated that the amendment had been under development for over 4 years. He also noted that the Council had, for the first time in its history, arranged for an additional set of public hearings, to ensure that the public was given adequate opportunity for input. He also commented that there was no intent to use genetically modified or non-native species or to include oil and gas platforms. He thanked all the attendees and reminded all participants to submit written comments on or before January 17, 2008.

The meeting adjourned at 7:45 p.m.

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PAASA Comments Before the Gulf of Mexico Fishery Management
Houston, Texas
December 10, 2007

The Port Arthur Area Shrimpers' Association was established in 2000 to bring together the interests of the Southeast Texas' fishing community, to provide an avenue to express of our shrimping community's concerns, and funnel regulatory, safety and commercial information to our members. Though the organization's members are primarily from the Vietnamese-American fishing community, we take great interest in issues that effect local snapper, longline and crab fishing industries.

Except for salmon fishermen, no other area of the fishing community knows more about the devastating effects of unregulated, open-market based aquaculture. Since 2002, the US shrimping community has been devastated by the dumping of farm raised shrimp. This led to the collapse of shrimp prices to less than half of the 2000 prices. Even after court victories that proved that shrimp from Vietnam, China, Thailand and other countries were dumped on the US market, prices have failed to recover. The damage was done.

With our experience of farm raised shrimp, the news of offshore marine aquaculture being developed in the Gulf of Mexico raises great concerns for us. Let me list a few:

- Consolidation of seafood production. Gulf fishing and shrimping is predominantly decentralized into family-based fishing companies. Aquaculture is generally controlled by a handful of national and international protein corporations. We see the challenges that family farmers face against the growth industrial farming as an example of what will occur in the Gulf of Mexico.

- The collapse of coastal fishing communities. With the decline in family-based fishing those coastal towns where they live and sail will lose their economic engines.

- The collapse of fish prices. When farmed raise shrimp and salmon were introduced into the market, they both caused the collapse of ex-vessel prices for wild caught product.

- The loss of fishing family viability with the collapse of prices and bankruptcy. This is joined together with the loss of millions of dollars of capital investment that is presently carried by local banks, lending institutions and manufacturers.

- The loss of additional shrimping grounds. Shrimping in the Gulf of Mexico is already restricted because of drilling and production platforms, pipelines, wrecks, marine preserves, and maritime fairways.

Since United States policies are most often crafted on a free market model, new economic initiatives usually suffer from insufficient time and resources being employed to understand the effects and consequences of the proposed action. The litany is heard over and over again that "the market will figure it out."

However, the consequences of leaving the development of Gulf of Mexico aquaculture only to market forces will have tragic environmental, communal and family consequences.

The Port Arthur Area Shrimpers' Association would hope to see the following considerations included in any proposal:

- Strong market controls which would restrict the issuance of permits, and aquaculture production when price pressure threatens price stability

- Organized effort to transition wild catch fishermen and their equipment into any offshore marine aquaculture.

- Better development of market options to purchase wild or farm raised product. Too often, farm raised product drives wild caught product off the shelves of stores.

Without serious efforts to support the wild caught fishermen, their investment,

their skills and their communities, then the devastating effects of farm raised salmon and shrimp will be the story of this effort.

Statement for Public Meeting on Aquaculture—

By Geoffrey Castro, CLEAN.

Good evening, my name is Geoffrey Castro and I am the Executive Director for Citizens League for Environmental Action Now. I am here today because I am concerned about the impacts of offshore aquaculture on the environment, coastal communities and public health.

I am particularly concerned about the potential for chemicals to flow straight into the ocean. As I understand it, water flowing out of fish farms can carry excessive nutrients, particulates, metals, antibiotics, pesticides, and other chemicals. Furthermore, there are numerous studies documenting how fish farms can become breeding grounds for illnesses and leading parasites and other diseases to escape the farm and infect wild fish.

There is also concern about Mercury. The current amendment draft fails to require testing for contaminants. Fish feeds contain concentrates of wild fish exposed to Mercury in the wild and the farmed fish can have high levels of mercury from the feed. Mercury bioaccumulates. The majority of people's exposures to mercury are through the consumption of contaminated seafood.

The Gulf Coast is already home to the national largest petrochemical complex in the entire country. As a result, we have some of the worst air in the nation. The notion of further extending industrial practices into the Gulf is unwise, as I see no need to further complicate our already numerous environmental problems with more off of our shores.

Due to serious environmental concerns and questions concerning economic viability the U.S. should work to manage the world's marine fisheries more sustainably, promote domestic consumption and allow more time for public comment.

Comments by Page Williams to Gulf of Mexico Fishery Management Council
December 10, 2007: Offshore Aquaculture in the Gulf of Mexico

I am the environmental chair for Houston Underwater Club, a member of the Marine Wildlife and Habitat Committee of national Sierra Club, a coastal issues coordinator for Houston Sierra Group and Lone Star Sierra Chapter, and a board member of the Gulf Restoration Network. Thank you for this opportunity to emphasize the distress these groups feel about your offshore aquaculture plans for the Gulf of Mexico.

When I first heard of the concept of aquaculture, it was in reference to raising shrimp in brine ponds in west Texas, back in the days when shrimpers were resisting TEDs instead of helping to refine and test them. Aquaculture seemed like a fine idea, and certainly there was no danger of a hurricane destroying the ponds, of a virus spreading from them to a wild shrimp population, or of escapees interbreeding, or competing, with the west Texas wildlife. I did not initially wonder what these shrimp would eat, or how one would dispose of their concentrated excrement.

Since then, the law of unintended consequences has provided us with many chances to learn what can go wrong with aquaculture. From Norway to Mexico, diseases have wiped out concentrated farm populations or spread to wild species. In New England, a pesticide to treat salmon sea lice contaminated wild scallops. In Hawaii, a fish farm grossly polluted the seafloor and severely depressed sea life. In Texas waters, pens have already been damaged by minor hurricanes, and climate experts tell us to expect more Katrina-category storms. Most recently, the Associated Press reported a massive jellyfish attack that wiped out an entire population of 100,000 salmon, worth $2 million, in sea pens off the coast of Northern Ireland.

If you seriously plan to issue 10-year permits to repeat these mistakes in the Gulf of Mexico, I can't help but wonder "*What* are you thinking? *Are* you thinking?" Have we not already had our share of jellyfish problems in the Gulf, without supplying them with bountiful prey neatly concentrated in pens? Do we need another Dead Zone, like the one we already have from land-based Mississippi River run-off - the result of excessive applications of nutrients, pesticides and antibiotics on factory farms, as well as from the concentrated fecal matter of confined animal feeding operations? We already have entire fish populations depleted and out of balance, with dolphins reportedly disappearing from coastal waters because menhaden are overfished - do you think that cobia and redfish will thrive on vegetables? There are too many unanswered questions and too many proven dangers to consider issuing 10-year permits for a business with such a scary track record.

Please do not lead the way toward further exploitation of the Gulf, rationalizing today's higher profit with a higher seafood yield. Please do lead the way to restore biodiversity and a healthy ecosystem to the Gulf, so that our children might enjoy restored fisheries and unpolluted wild-caught seafood tomorrow.