

**Summary of the
Aquaculture Amendment Public Hearing
Biloxi, MS
December 12, 2007**

Council and Staff:

Tom McIlwain
Wayne Swingle
Karen Hoak

The hearing was called to order and the opening statement was read by Chairman **Tom McIlwain** at 6:00 p.m. at the Wingate Inn in Biloxi, MS. **Wayne Swingle** gave a presentation on the Aquaculture Amendment. After the presentation, the meeting was opened for public comment. There were 44 members of the public in attendance and 10 people spoke.

Tom Becker, a Biloxi Charterboat captain, spoke in opposition to the amendment as currently developed. He personally witnessed an experimental aquaculture lab venture. He believed that the farms created problems with water fouling. Farms and their accompanying buffer zones also occupied desirable space that others would want to utilize for fishing. Fish farming should be studied in depth before any action was taken.

William (Bill) Hawkins of the Gulf Coast Research Lab at USM spoke in favor a U.S. Aquaculture industry and the amendment. He cited several concerns and reasons for his support:

- Imported farmed fish do not have controls that the U.S. standards would provide.
- Less than 1% of imported fish was inspected.
- Security was a concern in our current world economy.
- Minimal impact and manageable risk would be associated with marine aquaculture. For example:
 1. He noted that it was more likely that wild fish would infect farmed fish rather than visa versa.
 2. Regarding genetics, there were already models on genetics that would be highly applicable to aquaculture operations. Transgenic and non-native fish would not be allowed.
 3. Antibiotic use in open ocean aquaculture would not be feasible, either practically or economically. He felt that it was more likely that aquacultured fish would qualify as an organic food quite readily.

Terese Collins of the Gulf Islands Conservancy, Inc. spoke in opposition to the amendment. She felt it was inappropriate to have this proposal coinciding with their hurricane recovery and rebuilding efforts. From her point of view, the proposed regulation, in its current form, was not strong enough to protect and manage this industry. All impacts, both cumulative and secondary should be examined, including those to back bay waters, salt domes, oil rig issues, Katrina pollution, mercury, etc. Public processes should not be piecemealed. Strict regulations must be in place. If the process cannot be done right, it should not be done at all. Organizations that take grant money to study aquaculture would naturally be biased towards implementation of

aquaculture. In the past aquaculture had been considered but rejected, so she wondered what had changed recently to make aquaculture seem like a good idea now. She equated fish farms to floating factories; they are not small operations. Who would pay for the damage when they broke loose? Private industry accidents should not be paid for with public funds. The natural environment cannot be controlled. A cost/benefit analysis had not yet been done. She felt the Council should enhance the current fishery instead.

Howard Page of the Mississippi Sierra Club agreed with Ms. Collins, particularly her comments regarding the amendment being pushed through during their hurricane recovery efforts and the holiday season. He pointed out that by the numbers of participants, people were obviously concerned and wanted to be included in the process. He felt that the amendment did not sufficiently address serious concerns and was not conservative enough given the possible consequences. He also agreed with Dr. Hawkins regarding the dangers of imported fish, but the answer was not to replicate those mistakes.

Stanley Peterson was a commercial shrimper and spoke against the amendment. He wanted specific information on where these obstacles would be located and expressed concerns about the formation of additional dead zones. He suggested further studies and additional input from commercial fishers.

Paula Vassy, a pet shop owner, spoke against aquaculture indicating that the resource belongs to the people, not big business. Mississippi residents lost a lot of their resources to hurricanes. Wetlands had already been given up for several business ventures. Aquaculture would pollute the environment and the penned fish would absorb contaminants just as the wild stocks did. She compared giving juvenile fish medicines equivalent to giving human children vaccines. The bad side-effects sometimes take a long time before manifesting themselves. Ten year permits were a bad idea in her opinion. She stated that the Council's "solution to pollution was dilution" was a bad idea. She did not believe the Gulf water current speeds were sufficient to dissipate the farm wastes and nothing grown in the Gulf could be considered organic because pollutants were not going anywhere. Even in small amounts, poisons in the food chain cause harmful health effects in humans. Her experience had been that even in land-based fish farming, the farmers were unwilling to learn the basics about properly maintaining the ponds. She felt that taking essential wildlife habitat for economic gain was wrong and illegal. Proper regulations, monitoring, assessment, provisions for clean-ups and liability, and obligatory penalties were essential for any successful aquaculture ventures.

Steve Shepard, who did not specify affiliation with any organization, wondered how far from the barrier islands (water depth) the cages would be permitted. **Dr. McIlwain** responded that it would be in the EEZ, which was 3 miles off the barrier islands out to 200 miles. **Mr. Shepard** supposed that fish farm operators would place the cages as close to shore as possible in order to save money. He proposed making it mandatory that a particular depth (200 feet minimum) or water current strength be the determining factor in placement of cages. This would also protect the islands, their birds, and habitats. He supported only raising native species. He cited an example where Atlantic salmon were permitted in aquaculture in the Pacific region, and those fish were getting loose and creating problems. He was concerned particularly about farmed redfish. He compared farmed and wild fish to a house cat versus a tiger. The cages should be

built to withstand a category 5 hurricane. He also reiterated concerns about depleting menhaden and using wild fish as feed. Tarpon used to be plentiful before menhaden were harvested in mass quantities.

Marianne Cufone spoke on her own behalf in opposition to the amendment. She addressed Dr. Hawkins comments supporting aquaculture by stating that the impacts of aquaculture would be nothing more than guesswork since there are relatively few aquaculture facilities in the U.S. The current aquaculture document did not cite any data from U.S. facilities, nor did it cite data from other countries' facilities. Information was available; it was just not addressed in the amendment. She wondered what the concept of "manageable" meant regarding escapement. The Pacific northwest had problems from escapements of non-native farm fish. She supported the Council's preferred alternative of only using native fish, but she also wanted to exclude endangered, threatened, and highly migratory species. Pollution was one of the biggest issues from her point of view. The issues brought up needed to be thoroughly and carefully considered before moving forward on this amendment.

Sasha Bollag gave his statement (**attached**) in opposition on behalf of Food and Water Watch. The statement was presented and distributed at each of the public hearings. He also repeated the concerns about the hearing process and lack of public knowledge and understanding. He agreed with Ms. Cufone that the process should proceed slowly and carefully. He did not support using public resources for private gain.

M. O. "Buck" Lawrence spoke as a concerned citizen. He referred to language on pages xi and xii in the amendment, citing that the purpose of the aquaculture SIA (social impact analysis) was to consider impacts of the proposal in the human environment. Then 3 paragraphs later, the document states that no data was available. He suggested doing a social analysis first, *then* move forward, if appropriate. He went on to page xiii, citing where the document mentioned 5 fishing communities but demographic information was not available for use in evaluating whether the amendment would have an impact on low income or minority populations. He asserted that it was the Council's responsibility to look at the impact this amendment would have on the human environment. He could not say yet whether he supported aquaculture, but he did feel that the proper analyses were not being done.

Dr. McIlwain thanked the participants and reminded everyone to submit their comments on or before January 17, 2008. He also invited them to visit the Gulf Council web site for additional information.

The meeting adjourned at. 7:20 p.m.

Fish farming is coming soon to our Gulf waters: concerns for consumers and the environment

The Gulf of Mexico Fishery Management Council and the National Marine Fisheries Service are federal bodies that make decisions about fishing in U.S. waters. Right now they are finishing a plan to allow the growing of fish in huge floating cages out in our Gulf of Mexico. This is called “ocean fish farming”, “open ocean aquaculture” or “offshore aquaculture”. Whatever the name, it could cause serious problems for consumers and the environment! How?

- *More fish at lower prices does not mean good quality* – Farmed fish are bred to grow fast, reproduce often in overstocked stationary cages prone to disease and parasites and may be exposed to assorted antibiotics and other chemicals to combat illnesses and algae and barnacles. 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.
- *We export our good stuff and eat imports* - Currently the U.S. exports 71 percent of its domestic production, including tilapia, tuna, salmon, crabs, and some shrimp. Ironically, these all are among the six top seafood imports. Essentially, we are sending our U.S. fish abroad where it fetches a higher price, and serving our own citizens imported fish, often of a lesser quality, that is cheaper. Likely this will still be the case if we begin ocean fish farming in the Gulf, as it is intended to be a profitable industry - leaving the U.S. with the environmental consequences that could devastate wild fish populations and critical habitat, and little else.
- *Farms can infect wild fish* - Farmed fish are held in captivity, usually in much higher numbers than would be normal in the wild. Cramped quarters, concentrated fish wastes, stress and other factors are often breeding grounds for illness. In Norway, there have been numerous problems with farmed salmon spreading diseases to wild salmon. Something similar is now happening in the Pacific Northwest. Because the Gulf farm facilities will allow free flow of water in and out of the ocean, parasites and other diseases will be able to escape the farm and infect wild fish.
- *Farms could pollute the environment and wildlife* - Concentrated amounts of fish food, fish waste and any chemicals or antibiotics that may be used to treat the fish to kill parasites and diseases or to keep cages free of algae and barnacles will flow straight into ocean waters through the open cages. Environmental problems have been reported at one of the nation's four experimental fish farms. A farm affiliated with the University of Hawaii “grossly polluted” the seafloor and “severely depressed” sea life. Additionally, the cages themselves could become marine debris in the event they are damaged or pulled free by violent weather.
- *Growing fish on or nearby oil rigs* – Wild fish that feed and are caught around oil rigs may have more contaminants than those used in the farm. Mercury levels around oil and gas platforms have been found to be higher than normal, as have mercury levels in fish caught around those platforms and around fish farms. More studies are needed on whether the fish grown in farms near or on oil rigs have higher levels of mercury. Mercury is a known toxin to humans that affects the brain heart and immune system, especially for children and developing babies.
- *Keeping old oil rigs* - Another issue with oil rigs is that allowing fish farming on them might give oil companies an excuse to keep the rigs in place, when they were originally to be removed after they were finished extracting oil. It can cost up to \$5 million to remove a rig, and only about \$800k to convert it to another use, so of course oil companies prefer not to remove the rigs. This means we could have many old oil rigs remaining in the Gulf after they are done extracting oil.

Fortunately, we have a chance to fix this bad plan. Public hearings will be held in New Orleans, Louisiana on Tuesday December 11th from 6-9pm at the Airport Hilton, 901 Airline Drive, Kenner. (For directions, call: 504-469-5000). See you there!

**Summary of the
Aquaculture Amendment Public Hearing
Mobile, AL
December 13, 2007**

Council and Staff:

Bob Shipp
Wayne Swingle
Karen Hoak

The hearing was called to order and the opening statement was read by Chairman **Bob Shipp** at 6:00 p.m. at the Ashbury Hotel in Mobile, AL. **Wayne Swingle** gave a presentation on the Aquaculture Amendment. After the presentation, the meeting was opened for public comment. There were 18 members of the public in attendance and 9 people spoke.

Sasha Bollag presented his prepared statement (**attached**) in opposition on behalf of Food and Water Watch. This organization also plans to submit official written comments to the Council before the January 17th deadline.

B. G. Thompson, representing the Organized Seafood Association expressed concern and wondered if the NMFS had the resources to properly implement such an operation. They are already heavily burdened with responsibility in the current management system. Generally, he felt that going forward with this amendment would cause a lot of work without a lot to show for it.

Sue Anderson, a gillnet fisher attended on behalf of the Organized Seafood Association of Alabama. She came to obtain additional information and did not comment on the amendment.

David Martin, a commercial gillnet fisher expressed concern about existing restrictions and the potential impacts on the Gulf resources. After all the rebuilding efforts, to risk losing it all because of human error was incomprehensible. He saw many recreational fishers around oil rigs and wondered if they would be closed out of those areas because of cage placement.

Leslie McDonald spoke on behalf of the Mobile Sierra Club. She supported the concept of assisting the state's economy through new industry, but expressed concerns about the track records of existing fish farms. She felt a logical stance would be "better safe than sorry." Diseases and pollution would be hard to reverse once they were set in motion.

Pete Barber commented that people were afraid of something that they deemed was new. Fish commented that fish farming was thousands of years old and is a worldwide activity. He also noted that moving an amendment through the Council process would not happen quickly and that commercial fishermen had much more to worry about from overregulation rather than fish farming. He felt there was a misrepresentation about the status of fish populations in the Gulf and that fishermen were being shut out. On shore fish processing infrastructure was already in

place and would benefit from aquaculture. He saw aquaculture as a solution to problems, not a problem in itself.

Marianne Cufone of Environmental Matters refuted Mr. Barber's comments on the speed of the process. She stated that the amendment was supposed to be finalized in October 2007 and that after tonight, there were no more public hearings scheduled, other than the upcoming Council meeting. She further commented that although aquaculture was not new, open ocean aquaculture is new for the United States and would impact swimming, boating, diving, and other interests. As Vice-Chair of the Aquaculture Advisory Panel, she found that the Council process stopped completely some time back while Congress attempted to put a national plan in place. When that attempt failed, the Council resumed its plans in January 2007. From January to October was a very short period of time for an amendment process, perhaps the fastest she had ever seen. She felt the document was a good draft, not more than that. People needed to be informed so that they could make educated decisions on whether they supported a Gulfwide aquaculture industry. They should get involved in the process so that the Council would be confident about how to proceed. Public participation was crucial.

David Underhill of the Mobile Sierra Club wanted to educate himself further before offering remarks. After listening he felt that the incentive for the proposal was because others throughout the world in the global economy were already doing it. Although fish farming had gone on for thousands of years, recent developments in industrial technology allowed for consequences with a size and scope never before anticipated. Industrial contaminant side effects like the dead zones at the mouth of the Mississippi were cause for concern. And although the jobs created and economic gains achieved might seem attractive, the primary beneficiaries would be foreign consumers since these fish, like most U.S. fish, would likely be exported. Whether or not any economic benefit occurred for the local communities, impacts on the environment would be a certainty. He felt that the public had not been given adequate time to learn and understand what was being proposed.

Ernie Anderson of the Organized Seafood Association of Alabama expressed concern about the economic and social effects on the local fisheries. He wondered where traditional fishers would fall within this process since it seemed to require a lot of cash. He also expressed concern about how much detail went into Action 3 in the document. That much detail seemed to imply much concern and if the concern for monitoring was that great, he wondered if the funding provided for law enforcement would be adequate.

Dr. Shipp reminded everyone that those who could not attend could still submit their comments in writing on or before January 17, 2008. Also he pointed out that further comments would be taken during the upcoming Council meeting in January and again at the April Council meeting in Baton Rouge.

The meeting adjourned at 6:55 p.m.

**Summary of the
Aquaculture Amendment Public Hearing
New Orleans, LA
December 11, 2007**

Council and Staff:

Harlon Pearce
Wayne Swingle
Karen Hoak

The hearing was called to order and the opening statement was read by Chairman **Harlon Pearce** at 6:00 p.m. at the Hilton New Orleans Airport. **Wayne Swingle** gave a presentation on the Aquaculture Amendment. Thereafter the public was invited to speak. There were 72 members of the public in attendance and 17 people spoke.

Many people agreed with prior speakers before offering their own testimony. Therefore the common concerns were summarized below followed by the list of participants, their affiliation, and any specific comments or recommendations that were offered.

Several people commented that they felt the public input process was inadequate. Some of their concerns were:

1. If the current document was used going forward, it should not be considered anything more than a draft scoping document, not a final document.
 2. That their voiced concerns would be compressed into nothing more than a 2 paragraph summary.
 3. That the Council was not talking to and getting feedback from actual fishermen.
 4. Some stated that while hurricane ravaged areas were trying desperately to rebuild their lives, the stalled amendment suddenly started moving along again, which was suspicious to them. They wondered about this timing and absolutely opposed any fast-tracking of this amendment.
 5. People want an option to say "no" to entire proposal. The document did not offer a choice of prohibiting aquaculture altogether.
- Some felt that bad management had led to the current dilemma and now aquaculture was being touted as the panacea to fix a situation that poor management created.
 - Some wondered who stood to benefit financially from this industry and if that benefit was ethical or a conflict of interest.
 - Some wondered where the placement of cages would be allowed and expressed concern about being restricted in accessing popular fishing areas.
 - Participants wondered what economic impact the plan would have on coastal communities and whether aquaculture would be feasible for small family operations. Large industrial/corporate farms could harm the economies of coastal communities. Smaller businessmen could not afford to participate in this.
 - What would the impact of aquaculture be on commercial fishermen and market prices? The sentiment was to help, not harm the historical fishermen. Introduction of an entirely

