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Public Comment on Preliminary Report  
U.S. Commission on Ocean Policy  
1120 20<sup>th</sup> Street, NW  
Suite 200 North  
Washington, DC 20036

Dear U.S. Commissioners:

The Center for Food Safety (CFS) is pleased to submit these comments in response to the U.S. Commission on Ocean Policy's (USCOP) Preliminary Report. CFS is a 501(c)(3), non-profit membership organization working to protect human health and the environment by curbing the proliferation of harmful food production technologies and by promoting organic and other forms of sustainable agriculture. These comments will primarily focus on the sections of the reports discussing aquaculture.

### **AQUACULTURE**

The USCOP Report states in the beginning of the Marine Aquaculture section that “[n]ational management of marine aquaculture activities should minimize potential environmental impacts.”<sup>1</sup> The harmful environmental impacts caused by aquaculture are pointed out within the report and include:

- spread of disease among fish populations
- genetic contamination and competition between farmed (non-native and genetically modified) and native stocks<sup>2</sup>
- contamination of water quality, wetlands, and other natural habitats from aquaculture operation (contaminates include fish waste, dead fish, uneaten food, and the antibiotics and hormones used to promote growth in captivity)
- entangled marine mammals, attracted by the food source, in aquaculture nets

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<sup>1</sup> U.S. Commission On Ocean Policy, Preliminary Report 269 (Apr. 20, 2004).

<sup>2</sup> See *id.* at 199 (discussing the problems with invasive species).

- pressure on wild fisheries that are already fully exploited for obtaining fishmeal used to farm-raised carnivorous fish.<sup>3</sup>

In addition to highlighting the environmental impacts caused by aquaculture, the USCOP Commissioners outline the different federal agency roles over aquaculture.<sup>4</sup> This discussion demonstrates the complex and uncoordinated authority of the federal agencies over aquaculture. Due to the inconsistent laws and regulations, the Commission recommends a coordinated and consistent policy and regulatory framework for offshore aquaculture.<sup>5</sup>

Although the Commission focuses on remedying the uncoordinated federal agency roles over offshore aquaculture, the report fails to give any guidance on specifically preventing environmental harm. Instead of addressing the prevention of environmental harm from aquaculture facilities, the Commission broadly recommends giving NOAA authority to implement a national policy. Within this policy, the Commission recommends streamlining the permit process. Rather than recommending the creation of stringent environmental regulations, the Commission states that economics and environmental issues should be balanced and proposes industry favored best management practices in the place of environmental regulations.<sup>6</sup>

### **Recommendations**

CFS is concerned that these recommendations will not prevent environmental harm and thus recommends the following changes to the preliminary USCOP Report. Recommendation 22-2 should be changed to the following:

Moratorium on commercial offshore aquaculture until legislation and NOAA's new Office of Sustainable Marine Aquaculture is established and environmentally sound regulatory standards are in place.

Environmental standards should be included in the Offshore Aquaculture Legislation.<sup>7</sup> These standards should include:

- An environmental impact statement shall be done before any permit is issued. The environmental review shall consider chemical and biological pollutants and their affects on the benthic environment, water column and the organisms that inhabit them. The environmental review shall also assess impacts to marine mammals, endangered species, and birds.

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<sup>3</sup> Id. at 269.

<sup>4</sup> Id. at 272.

<sup>5</sup> Id.

<sup>6</sup> Id. at 273

<sup>7</sup> Due to the serious environmental problems posed by offshore aquaculture, environmental standards should be included within legislation rather than deferring this responsibility to NOAA. See eg. Endangered Species Act, 16 U.S.C. § 1531-1544. In order to implement these environmental legislative standards, NOAA should conduct a rulemaking and draft detailed rules.

- Permits will only be issued if it can be shown that the facility, either alone or in combination with other aquaculture facilities, will not significantly harm the health, integrity, or productivity of a marine ecosystem or impede its restoration
- In the case of inconclusive information regarding the effects of the aquaculture site, federal agencies shall err on the side of protection, maintenance, and restoration of the ecosystem.
- Aquaculture facilities should not be sited in a marine protected area (as defined under Executive Order 1358)
- No nonnative or genetically engineered fish shall be grown in offshore aquaculture facilities. Farmed fish shall be tagged.
- The terms and conditions of permits shall be part of a transparent public notice and comment process
- A permit must specify the number of fish to be grown at the site.
- If damage to the ecosystem occurs as a result of the aquaculture facility, the owner shall be responsible for all restoration costs.
- Detailed records must be kept on all drugs, chemicals and antibiotics used in an aquaculture facility, including the amounts used and applied. Only drugs approved by the Food and Drug Administration shall be permitted. Drug and chemical records shall be available to the public.
- It is mandatory for each facility to report to NOAA any outbreaks of disease, escapes of farmed fish (including the number escaped), and entanglement or interactions with marine mammals or endangered species.
- Continuous monitoring of disease shall occur and the facilities shall be closed when contagious outbreaks occur
- Each permit must contain a bonding provision to ensure that if aquaculture facilities are abandoned, the site is returned to its original state
- Substantial fines shall be imposed for violations of permit conditions
- There shall be periodic monitoring of dissolved oxygen, carbon dioxide, ammonia and other water quality parameters in and around aquaculture facilities and criteria shall be established by EPA for preventing migrating pollution levels.

- NOAA shall inspect facilities yearly. These reports shall be available for public review.
- These requirements do not eclipse the authority of other agencies. EPA retains jurisdiction under the Clean Water Act in the EEZ. No aquaculture facility shall receive a permit without first receiving a National Pollution Discharge Elimination System permit and meeting EPA's Ocean Discharge Criteria requirements.

It is critical that these standards are adopted into legislation. As recognized by the Commission, there are numerous environmental threats posed by aquaculture. To prevent these impacts from occurring, strong environmental standards must be adopted within the offshore aquaculture legislation.

### **CONTAMINATED SEAFOOD**

The Commissioners also outline the serious human health problems with the farmed seafood that is imported into this country. The U.S. imports the majority of its seafood yet only about two percent of this is inspected.<sup>8</sup> The problem with this approach is that the countries where this seafood is imported from do not have the rigorous human health safety standards as the U.S. To compound this problem, the U.S. tests for only five chemicals out of the more than thirty used in foreign aquaculture.<sup>9</sup> As a result of the fundamentally flawed inspection program, it must be assumed that contaminated seafood is coming into this country. While other countries test for banned drugs and chemicals such as malachite green (fungicide) and oxytetracycline (antibiotic), the U.S. does not test for these chemicals in salmon.<sup>10</sup>

Although the Commissioners recognize the serious human health risks with imported farmed fish, the Commissioners fail to make any recommendations on how to alleviate this problem. Because it is likely that people are consuming imported seafood that contain drugs and chemicals that are not approved by the FDA, CFS is concerned that this problem is not being addressed by the Commissioners.

### **Recommendations**

To protect the health of seafood consumers, CFS recommends that the Commissioners direct FDA to do the following:

- FDA should inspect more seafood imported into the country, beginning with the inspection of at least 50 percent.

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<sup>8</sup> Id. at 283.

<sup>9</sup> Id.

<sup>10</sup> Id.

- FDA should test for more drugs and chemicals in seafood, at least as many as are tested in the other countries, such as the U.K.
- FDA should aggressively conduct research in order to develop the tests needed to screen for all the drugs used in foreign aquaculture

### **CONCLUSION**

CFS is concerned about the safety of our seafood and the impacts of aquaculture on the environment. CFS encourages the Commissioners to incorporate these recommendations into the final report.

Sincerely,

Tracie Letterman  
Fish Program Director