



SOUTH COUNTY FISHMONGER

December 16, 2022

David Holst  
Chief Financial Officer and Administrative Officer  
Office of Oceanic and Atmospheric Research  
National Oceanic and Atmospheric Administration

RE: Public Comment on Draft PEA Aquaculture Research and Development

Dear Mr. Holst:

Don't Cage Our Oceans is a coalition of 26 diverse organizations representing 4.3 million people, working together to stop the development of offshore finfish farming in the United States through federal law, policies, and coalition building. DCO2 uplifts values-based seafood systems led by local communities. **We and our members firmly endorse Alternative 1, the "No Action" Alternative.**

While aquaculture programs beneficial to the public have been advanced through various programs administered by the National Oceanic and Atmospheric Administration (NOAA) – the Office of Atmospheric Research Sea Grant, the National Marine Fisheries Service (NMFS) Saltonstall-Kennedy Grant program, and Small Business Innovation Research (SBIR) program – great harm has also been caused and endorsed by these very same programs. Too many millions of dollars have already been wasted by NOAA in its misguided attempts to prop up unnecessary and troublesome factory fish farms in U.S. waters, and the agency has demonstrated an utter failure to heed the urgent pleas of the vast majority of stakeholders, who oppose such taxpayer giveaways to companies that actively harm our fishing and coastal communities, and marine ecosystems.

Our members remain leery of this PEA's purpose, particularly against the backdrop of a consistent multi-year effort by the agency to force the U.S. public to accept this unwanted form of aquaculture. NOAA's feigned inability to differentiate between, for example, a responsibly-operated and community-supported oyster farm, and an investor-owned and industrial agribusiness-supported factory fish farm, leave the public rightfully skeptical of strategic plans or programmatic environmental assessments that originate from the agency. While the scope of the PEA excludes *some activities* associated with offshore finfish aquaculture installation and operations, (PEA 1.7), the vast majority, including very problematic ones, are allowed under this PEA.

### **NOAA's lack of legal authority to regulate aquaculture in U.S. federal waters**

NOAA repeatedly asserts authority in setting up and permitting an unprecedented nation-wide system of commercial industrial-scale offshore aquaculture installations across all U.S. waters, even though Congress has never passed any legislation granting the agency authority to do so. Furthermore, the courts have affirmed this lack of authority to oversee aquaculture activities in federal waters: in 2020 the Fifth Circuit held that NOAA indeed lacks any statutory authority to regulate aquaculture.<sup>1</sup>

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<sup>1</sup> *Gulf Fishermens Ass'n v. Nat'l Marine Fisheries Serv.*, 968 F. 3d 454 (5th Cir. 2020).

Additionally, while the agency may argue that the proposed PEA in this case only pertains to the *funding* of aquaculture, and not the permitting of the practice, we cannot artificially separate the two when NOAA (1) seeks to be the very same agency that would lead on regulation and permitting of offshore fish farms, (2) has spent millions of dollars propping up this unnecessary and dangerous industry so far, and (3) purports to objectively examine the “cumulative impacts” of these decisions (PEA 4.6), while mostly ignoring potential serious consequences.

In PEA 1.2, NOAA boldly claims that the agency “has a multi-faceted role in aquaculture development in the United States, from supporting science and research to federal policy-making and regulation. Multiple mandates including, but not limited to, statutes and Executive Orders (EOs), charge NOAA with ensuring that U.S. aquaculture develops sustainably, in concert with healthy, productive, and resilient coastal ecosystems.” This is a gross exaggeration of authority, and redirects attention from the only statute that could potentially grant such authority to NOAA - the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

In fact, the agency *previously claimed* that MSA gave them the authority to regulate aquaculture in U.S. federal waters, despite there being no language, whatsoever, in the statute delegating such authority to NOAA. Indeed, the federal courts took issue with the agency’s interpretation of statutory authority, and twice ruled against the agency. The 5th Circuit court case *Gulf Fishermens Ass’n* held that NOAA does not have authority to permit or regulate aquaculture in the U.S. federal waters of the Gulf of Mexico, as there is no Congressional authorization to do so under MSA.<sup>2</sup> For years, NOAA had claimed that MSA had provided authority under the contorted view that aquaculture falls under the statutory definition of “fishing” for purposes of MSA, as fish are ultimately extracted from net pens, and that NOAA could thus create a fishery management plan (FMP) to regulate aquaculture. Both the 5th Circuit Court and the lower court saw through this incorrect justification, and appropriately ruled against it.

In PEA 1.2.1, NOAA lists several internal agency policies that all stem from a 1980 statute. NOAA has claimed authority to regulate aquaculture via its role in the interagency Subcommittee on Aquaculture,<sup>3</sup> established by the National Aquaculture Act of 1980.<sup>4</sup> This legislation identifies the U.S. Department of Agriculture as the lead agency on aquaculture, and barely assigns *any* responsibilities to the Department of Commerce (NOAA) at all, let alone authority to designate AOA. **The Act requires only consultation with NOAA for a biennial report on the *status* of**

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<sup>2</sup> *Gulf Fishermens Ass’n v. Nat’l Marine Fisheries Serv.*, 968 F. 3d 454 (5th Cir. 2020).

<sup>3</sup> NSTC Subcommittee on Aquaculture, A Strategic Plan to Enhance Regulatory Efficiency in Aquaculture. Feb. 2022,

([https://www.ars.usda.gov/sca/Documents/2022%20NSTC%20Subcommittee%20on%20Aquaculture%20Regulatory%20Efficiency%20Plan\\_Final%20508%20compliant.pdf](https://www.ars.usda.gov/sca/Documents/2022%20NSTC%20Subcommittee%20on%20Aquaculture%20Regulatory%20Efficiency%20Plan_Final%20508%20compliant.pdf))

<sup>4</sup> 16 U.S.C. §§ 2801-2810.

**aquaculture,<sup>5</sup> and several studies due 35 years ago.<sup>6</sup>** None of these submissions required NOAA to continually advocate for industrial fish farming in our oceans.

The PEA also makes the claim in 1.2. that “multiple mandates including...Executive Orders (EOs)” direct NOAA to develop aquaculture.” We can find only one Executive Order purporting to do so, EO 13921, issued by President Trump in 2020. Near the time of the Federal 5th Circuit court ruling, the Trump Administration issued an executive order to attempt to grant NOAA authority where Congress had not. Yet executive orders cannot confer authority on agencies because the president’s powers are executive, not legislative, in nature.<sup>7</sup> Rather, the President's authority to act “must stem either from an act of Congress or from the Constitution itself.”<sup>8</sup> As a result, EO 13921 cannot allow NOAA to establish a new offshore aquaculture industry in the absence of any statutory authority so doing, granted by Congress.

In June 2022, the U.S. Supreme Court made plain that an agency must “point to ‘clear congressional authorization’ for the authority it claims.”<sup>9</sup> NOAA’s attempts here to promote and lead a brand-new, highly controversial industry without pointing to statutory text provides just such an “extraordinary case” in which the “history and the breadth of the authority that [the agency] has asserted,” provides a “reason to hesitate before concluding that Congress” meant to confer such authority.<sup>10</sup> Here, there is no ambiguity. Congress has never given NOAA the authority to regulate aquaculture in federal waters, and the courts supported this interpretation.

EO 13921 is an attempt to circumvent Congress, which has repeatedly demonstrated immense skepticism of offshore aquaculture. It is meant to lay the groundwork for large-scale fish farming in federal waters — an industrial activity that is overwhelmingly opposed by the public when the details and risks are made clear. This EO required the agency to designate wildly unpopular “Aquaculture Opportunity Areas” in the Gulf of Mexico and Southern California Bight. **Public comments opposed the creation of these industry-friendly AOs by over 90% in the Gulf and**

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<sup>5</sup> *Id.* § 2804(d).

<sup>6</sup> *Id.* § 2804(c)(1)(C), (D) (requiring the Department of Commerce to submit studies by December 31, 1987).

<sup>7</sup> *Doe #1 v. Trump*, 957 F.3d 1050, 1062 (9th Cir. 2020) (citing *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 587 (1952) (“[T]he President's power to see that the laws are faithfully executed refutes the idea that he is to be a lawmaker.”)).

<sup>8</sup> *Id.* at 585.

<sup>9</sup> *W. Virginia v. EPA*, No. 20-1530, 2022 WL 2347278, at \*3 (U.S. June 30, 2022) (citing *Util. Air Regul. Grp. v. EPA*, 573 U.S. 302, 324 (2014)).

<sup>10</sup> *W. Virginia*, 2022 WL 2347278, at \*3; see also *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 159-160 (2000); *Nat’l Fed’n of Indep. Bus. v. Dep’t of Lab., Occupational Safety & Health Admin.*, 142 S. Ct. 661, 666, 211 L. Ed. 2d 448 (2022).

**over 68% in Southern California.** Meanwhile, comments in support were 4.9% and 7.9% respectively, primarily being provided by those who stand to financially gain from the turnover of public resources to private businesses. This reflects NOAA's lack of competence in hearing the clear message sent by affected stakeholders, and highlights the agency's seeming interest in supporting private profit over its public trust duties.

Even if NOAA's permitting and regulating of aquaculture were legal, there are a variety of other compelling reasons why this activity should not move forward. We reiterate that there cannot be an artificial separation between the funding of aquaculture and the permitting of the practice, especially when (1) NOAA also seeks to be both the funder and lead regulator of offshore fish farms, (2) NOAA has spent millions of dollars propping up this unwanted and unnecessary industry so far, and (3) NOAA feigns to be an objective voice in examining the cumulative impacts of these decisions (in PEA 4.6).

### **NOAA Fisheries has gone rogue in its relentless promotion of offshore fish farming**

Privatizing public resources for the benefit of large corporations, especially those not from the U.S., is inherently un-American. Through the Aquaculture Opportunity Area (AOA) designation process, NOAA is proposing to carve up and hand out control of our federal ocean spaces – a public resource that should be managed for the benefit of all – to private corporations and foreign interests. In rushing through permitting for marine finfish aquaculture, NOAA is actively harming fishing families and the many small businesses in coastal communities that support them. NOAA should instead focus on assisting independent fishermen and co-ops, and other community-based, sustainable seafood producers, as their small businesses continue to recover from the ongoing COVID pandemic. Investing the money to support fishing families and other community-based seafood producers would not only be the right thing to do, but is actually an area already within NOAA's legal purview, under MSA.

It is troubling that the Biden Administration would want to push through an unnecessary and unwanted program like industrial scale marine finfish aquaculture when this approach is so detached from actually supporting people to access food. These factory farms take significant time and money to build; they are not community driven nor will they benefit people in the coastal communities that they will impact most. The species grown in these facilities are high-trophic level fish that are mostly destined for high-end domestic and foreign markets. Confined Animal Feedlot Operations (CAFO)-style fish farming has been repeatedly met with fierce opposition from the public, Congress, and even the courts.

Few people want to see this industry get a foothold in our public waters, except for mega-corporations (like Cargill, Merck, Sysco, Nordic Aquafarms, etc.), their shareholders, and their [trade groups](#) that see an opportunity to profit from industrially produced fish. In the recent NOAA listening sessions for NOAA's 5 year draft strategic plan on aquaculture, people overwhelmingly voiced their opposition to the inclusion of marine finfish aquaculture as part of NOAA's vision, and urged its removal from the strategic plan.

NOAA has repeatedly failed to secure public buy-in or societal license to push forward industrial fish farms in federal waters, despite many efforts to do so. Participants in the commercial fishing industry have [collectively voiced their concerns](#) over being forced to coexist with the marine aquaculture industry, stating that "this emerging industrial practice is incompatible with the sustainable commercial fishing practices embraced by our nation for generations and contravenes our vision for environmentally sound management of our oceans." Furthermore, coastal residents and stakeholders who submitted comments and live in the two proposed Aquaculture Opportunity Area (AOA) regions in southern California and the Gulf of Mexico federal waters have ***overwhelmingly rejected*** NOAA's effort to site industrial fish farms in these AOAs, by margins of two-thirds and ninety percent, respectively. NOAA's obstinance and desire to nonetheless keep rewarding this unwanted industry with ongoing cash infusions suggests a need for Congress to step in and correct this errant behavior through legislation.

### **NOAA has already given away millions of public dollars to offshore fish farm companies**

For years, NOAA has been funneling millions of taxpayer dollars into research, development, and start-up funding to help develop CAFO-style finfish farms in U.S. waters. These funds directly benefit the aquaculture industry, and are routed through programs like NOAA Sea Grant, the NMFS Saltonstall-Kennedy grant program, and the Small Business Innovative Research Program (SBIR), which are all at issue here under the PEA. The agency is hardly a disinterested partner in this space, and is listed as a member of the Ocean Stewards Institute, in its California Sea Grant capacity. The [Ocean Stewards Institute](#) identifies as "a trade organization advocating for the emerging open ocean aquaculture industry." This is inappropriate behavior for one of our federal agencies tasked with conservation and management of our natural resources for the benefit of the U.S. public.

The recently-released [NOAA Aquaculture Strategic Plan \(2023-2028\)](#) also illustrates the agency's vision in promoting harmful CAFO-style offshore fish farming along with other more responsible forms of aquaculture. Coupling this with the agency's funding of risky forms of aquaculture (or research that would ultimately benefit CAFO-style fish farming) for just 2022 alone, it is clear

that NOAA will continue to pursue a misguided and inappropriate agenda to support offshore aquaculture despite widespread public opposition.

### ***NOAA Sea Grant program's purpose***

As described in PEA 1.2.2 and PEA 5.13, the National Sea Grant College Program Act of 1996 ("Sea Grant") "identifies NOAA as the 'most suitable locus and means for' promoting activities 'that will results in greater understanding, assessment, development, management, utilization, and conservation of the ocean, coastal, and Great Lakes resources.'" Our members agree that when used thoughtfully, the Sea Grant program is a valuable source of much needed funding in an area that might otherwise be overlooked. For example, Sea Grant has been instrumental in providing research in very complex and dynamic subject areas (further complicated by climate change), launching and sustaining the careers of marine scientists and policy-makers, and providing fishing and aquaculture communities with the tools and support they need to stay afloat in difficult economic times. Of course, all of this is outside of the scope of this PEA, which "serves as a framework to analyze the potential impacts on the natural and human environment from *aquaculture research and development projects*" undertaken by OAR and NMFS. (PEA, Executive Summary, emphasis added.)

Congressional enthusiasm for NOAA's role in tackling broad-based oceanic research and conservation initiatives is reflected in the National Sea Grant College Program Amendment Act of 2019 (33 U.S.C. 1123), as noted in PEA 5.13. This reauthorizes through FY 2024 and revises the National Sea Grant College Program, "through which NOAA supports university-based programs that focus on studying, **conserving**, and effectively using U.S. coastal resources. The bill authorizes federal financial assistance awards for (1) priority issues identified in the National Sea Grant Program's strategic plan, and (2) university research on **sustainable** aquaculture techniques and technologies." (Emphasis added.)

### ***NOAA Sea Grant's National Strategic Plan and how NOAA defines sustainability***

Oddly, NOAA's [Sea Grant National Strategic Plan for 2018-2023](#) does not define the term "sustainability." Yet, if we refer to the [prior 2014-2017 strategic plan](#), we encounter the following definition provided by the agency: "Sustainability is defined as meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. Sustainability has three equally weighted components: economic, social and environmental." **When viewed through this lens, NOAA has fallen woefully short on abiding by its own definition of what is "sustainable."**

To be clear, a substantial amount of Sea Grant funding is to improve existing forms of aquaculture that might not be perfect, but do contribute to these three “equally weighted components: economic, social and environmental.” Shellfish aquaculture, seaweed aquaculture, and certain land-based recirculating aquaculture systems (RAS) run the spectrum in terms of how they operate along: (1) economic factors (their contribution to the local economy, jobs, and who owns the facilities and benefits from the economic growth); (2) social factors (how other ocean users and coastal communities are impacted and whether there is community buy-in); and, (3) environmental factors (how the marine ecosystem – flora and fauna – is impacted via siting and usage, impact on freshwater resources for land-based aquaculture. Research and understanding of site-appropriate, thoughtfully sized, and species-appropriate aquaculture based on local environmental and social considerations is valuable, and local residents seeking to earn a living doing aquaculture the right way should be applauded for their contributions.

But here is where the good news ends. For at the same time, the Sea Grant program has also been misused by the agency to promote an unnecessary and unwanted form of aquaculture - offshore finfish farming - that **is inherently unsustainable** economically, socially, and environmentally. The entire nation is harmed when the agency seeks to support the very agribusinesses who endorse a broken method of food production – factory farming – and seek to apply this destructive practice to our oceans.

Factory fish farming fails *economically* because it is a heavily subsidized area that favors large multinational and foreign corporations that can afford to set up the capital intensive operations in the first place. It depletes local economies and resources, transferring wealth away from coastal communities and into the pockets of distant investors. In other words, it is a federally-funded form of corporate welfare that amounts to “ocean grabbing.”

Factory fish farming fails *socially* because it severely detracts from other ocean users who seek to enjoy the ocean or make a living from it. The heightened levels of pollution render local tourism unattractive. The siting of these facilities, support barges, and catastrophic and ongoing fish escapes all harm commercial fishing families and thus the various businesses that support them as well. Once the regional community’s “ecosystem services” are exhausted, the local economy suffers in perpetuity while the fish farm operators pack up and move to cleaner waters (e.g., Chile’s salmon farming industry).

Factory fish farming fails *environmentally* because it openly discharges untreated waste into our shared marine ecosystem (many planned facilities hope to discharge untreated fecal matter, in amounts as much as those from major U.S. cities). These fish farms contribute to eutrophication and red tide events. Countless fish farm mooring lines harm marine mammals and other



creatures like sea turtles, and the fish farms' propensity to serve as a "fish aggregating devices" disrupts the normal behavior of wildlife. The factory fish farms serve as parasitic breeding grounds and these parasites indisputably transfer to wild fish populations. In an effort to combat sea lice and illnesses, operators use toxic chemicals that also discharge into the environment. And carnivorous farmed fish require high protein fishmeal inputs in the form of forage fish - actually *leading to a net loss in fish*, directly contributing to overfishing and destabilizing food security, particularly in the Global South.

This abbreviated summary is just the beginning of the list of harms; our members encourage the agency to reach out should it be interested in learning more about economic, social, and environmental harms caused by factory finfish farming.

### **Examples of problematic aquaculture funding in the federal financial assistance award programs under the scope of this PEA**

#### ***Problematic funding in the NOAA Sea Grant program***

The scope of analyzing NOAA Sea Grant funding since the program's inception is too large for our purposes here. Our coalition trusts that providing a small subset of the last few years will illustrate areas that NOAA should immediately reform. From the years 2017-2022, *through the NOAA Sea Grant program alone*, we found that NOAA has invested at least **\$16.21 million** in research and development for the offshore fish farm industry,<sup>11</sup> in many cases by using public assets to generate valuable R&D - freely gifted - to large-scale fish farm companies, and through

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<sup>11</sup> For all broad-based statements that cite aggregate money totals of funding via NOAA Sea Grants, Saltonstall-Kennedy Grants, and SBIR grants, please consult hereinafter our [spreadsheet](#).

direct grants to these companies and their academic partners.<sup>12 13 14 15 16 17 18</sup> It has also allocated money toward areas outside its legal authority (e.g., by pre-permitting federal ocean space for marine aquaculture<sup>19</sup> or “assessing policy barriers to mariculture”<sup>20</sup> in U.S. waters. It has even

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<sup>12</sup> \$139,474 (2017) SG to Kampachi Fish Farms (now Ocean Era) via University of Florida for its Velella Epsilon project in the Gulf of Mexico  
<https://seagrant.noaa.gov/News/Article/ArtMID/1660/ArticleID/1656/Sea-Grant-announces-93-million-for-aquaculture-research-and-industry-support>;

<sup>13</sup> \$994,955 (2017) SG to Reed Aquaculture, Virginia Tech, and University of Florida, via The University of Southern Mississippi  
<https://seagrant.noaa.gov/News/Article/ArtMID/1660/ArticleID/1656/Sea-Grant-awards-2017-aquaculture-grants>

<sup>14</sup> \$628,629 (2017) SG to corporate-backed HSWRI and Reed Aquaculture, among others, via Oregon State University for improved fish feed,  
<https://seagrant.noaa.gov/News/Article/ArtMID/1660/ArticleID/1656/Sea-Grant-awards-2017-aquaculture-grants>

<sup>15</sup> \$701,081 (2018) SG to Florida Atlantic University Harbor Branch Oceanographic Institute to research the commercialization of pompano aquaculture, with “technology transfer to industry partners.”  
<https://seagrant.noaa.gov/News/Article/ArtMID/1660/ArticleID/2700/Sea-Grant-Announces-2018-Aquaculture-Research-Awards>

<sup>16</sup> \$748,283 (2022) SG for “Catalyzing Marine Finfish Aquaculture Through Public Aquariums,” via Woods Hole Sea Grant  
<https://seagrant.noaa.gov/Portals/0/Documents/Funding/Sea%20Grant%20Fall%202022%20Aquaculture%20Projects%20List.pdf>

<sup>17</sup> \$628,234 (2022) SG to “aid in the expansion of the [California yellowtail] segment of the aquaculture industry,” which directly benefits the corporate-backed HSWRI offshore fish farm, via California Sea Grant; and \$709,093 (2022) SG to benefit the very same species and aid the very same company by improving larval performance, via Maine Sea Grant and the University of Maine.  
[https://docs.google.com/spreadsheets/d/10lj8NygNf4Ds6c42vYXVOxVAcz6LkUSP\\_8R\\_nHaEt3l/edit#gid=0](https://docs.google.com/spreadsheets/d/10lj8NygNf4Ds6c42vYXVOxVAcz6LkUSP_8R_nHaEt3l/edit#gid=0)

<sup>18</sup> \$999,999 (2022) SG to improve Almaco jack broodstock and “benefit the aquaculture industry focused on production of this species by improving production efficiencies and will potentially lead to expansion of this industry.” This directly helps the company Ocean Era, and its proposed development of its Velella Epsilon project in the Gulf of Mexico, and is supported via Hawaii Sea Grant.  
<https://seagrant.noaa.gov/Portals/0/Documents/Funding/Sea%20Grant%20Fall%202022%20Aquaculture%20Projects%20List.pdf>

<sup>19</sup> \$539,793 (2017) SG with Woods Hole and the Massachusetts Aquaculture Association  
<https://seagrant.noaa.gov/News/Article/ArtMID/1660/ArticleID/1656/Sea-Grant-announces-93-million-for-aquaculture-research-and-industry-support>

<sup>20</sup> \$199,272 (2019) SG with several academic institutions and agency, via University of California, Santa Barbara  
<https://seagrant.noaa.gov/Portals/0/Documents/Sea%20Grant%202019%20National%20Aquaculture%20Initiative%20Funded%20Projects%20and%20Programs%20Sept2019.pdf>

spent money for propaganda to try and convince the U.S. public<sup>21 22 23 24</sup> and even children<sup>25</sup> to buy and/or eat fish that was grown in CAFO-like conditions.

The examples provided are just a subset of the overall scope of taxpayer money being funneled into a federally-backed effort to prop up an already well-financed and problematic industry. Our members are saddened to see the Sea Grant program being twisted in such a way to be contrary to its original mission. Unfortunately, 2022 grants doubled down on the agency's support of factory fish farm interests. Over \$1.3 million was allocated toward research that will ultimately benefit the Hubbs Sea World Research Institute and the Pacific6 Enterprises investment group to commercially grow sashimi grade yellowtail in southern California. Another \$1 million grant was awarded for Almaco jack broodstock research<sup>26</sup> that will ultimately benefit the Ocean Era corporation in its effort to grow Almaco jack in the Gulf of Mexico. It is urgent that the agency reflect on its true mission and remember that it serves the U.S. public, not the unwanted and unneeded big corporate development of seafood production.

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<sup>21</sup> \$147,737 (2017) SG with the industry-funded Seafood Nutrition Partnership via University of Southern California

<https://seagrant.noaa.gov/News/Article/ArtMID/1660/ArticleID/1656/Sea-Grant-announces-93-million-for-aquaculture-research-and-industry-support>

<sup>22</sup> \$465,748 (2018) SG with seafood industry associations, professional marketing firms, NGOs, and University of Washington researchers,

<https://seagrant.noaa.gov/News/Article/ArtMID/1660/ArticleID/2700/Sea-Grant-Announces-2018-Aquaculture-Research-Awards>

<sup>23</sup> \$182,108 (2018) SG "to increase end-user confidence in U.S. farm-raised seafood" by partnering with "U.S. aquaculture industry partners in the area of foodservice education" and other entities, via New York Sea Grant

<https://seagrant.noaa.gov/News/Article/ArtMID/1660/ArticleID/2700/Sea-Grant-Announces-2018-Aquaculture-Research-Awards>

<sup>24</sup> \$165,698 (2019) SG for "an assessment of perceptions of marine aquaculture by the US food service industry and finding challenges and opportunities for expanding the US aquaculture industry" via three universities

<https://seagrant.noaa.gov/Portals/0/Documents/Sea%20Grant%202019%20National%20Aquaculture%20Initiative%20Funded%20Projects%20and%20Programs%20Sept2019.pdf>

<sup>25</sup> \$165,582 (2019) SG to University of Hawaii and a local high school,

<https://seagrant.noaa.gov/Portals/0/Documents/Sea%20Grant%202019%20National%20Aquaculture%20Initiative%20Funded%20Projects%20and%20Programs%20Sept2019.pdf>.

<sup>26</sup> \$999,999 (2022) SG to improve Almaco jack broodstock and "benefit the aquaculture industry focused on production of this species by improving production efficiencies and will potentially lead to expansion of this industry." This directly helps the company Ocean Era, and its proposed development of its Vellella Epsilon project in the Gulf of Mexico, and is supported via Hawaii Sea Grant.

<https://seagrant.noaa.gov/Portals/0/Documents/Funding/Sea%20Grant%20Fall%202022%20Aquaculture%20Projects%20List.pdf>

### ***Problematic funding in the NMFS Saltonstall-Kennedy (“S-K”) Grant program***

The S-K program, as it is known, “annually funds approximately 40 projects for \$10 million that lead to the promotion, development and marketing of U.S. fisheries.” Unfortunately, even here we have seen efforts by NMFS to fund factory fish farming instead of supporting existing U.S. fisheries, which is its stated purpose. From 2014-2022, **\$6.1 million** was awarded in grants to bolster the offshore fish farming industry. When limited to just 2017-2022, that figure is **\$4.3 million**. This includes a 2022 grant of \$299,999 to (again) Ocean Era to aid the company in rearing carnivorous Hawaiian snapper.<sup>27</sup> This same company also benefits from the aforementioned \$1 million Sea Grant research award<sup>28</sup> that will study how to improve the efficiency of Almaco jack broodstock, the same species it plans to grow in the Gulf of Mexico.

Several grants have gone to fishmeal projects,<sup>29 30 31 32 33 34 35</sup> including a \$220,000 grant to build a fishmeal processing facility in Hawaii to support the factory fish farming industry there.<sup>36</sup> There have been other S-K grants that test new anti-fouling coatings for fish cages,<sup>37</sup> to more successfully grow marine fish larvae and improve rearing techniques for offshore aquaculture purposes,<sup>38 39 40 41</sup> including to transition traditional Hawaiian fishponds into larger-scale aquaculture enterprises,<sup>42</sup> and try to generate more positive public perceptions of factory-scale fish farming.<sup>43 44</sup> These are just a few examples of the ongoing effort by NOAA to distribute

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<sup>27</sup> S-K grant, 2022, \$299,999 to Ocean Era, Inc.

[https://media.fisheries.noaa.gov/2022-04/FY22%20S-K%20Awards\\_0.pdf](https://media.fisheries.noaa.gov/2022-04/FY22%20S-K%20Awards_0.pdf). NOTE: Please see our [spreadsheet](#) for a full breakdown of S-K grants along with source links, for the S-K grant citations that follow throughout this section.

<sup>28</sup> \$999,999 (2022) SG to improve Almaco jack broodstock and “benefit the aquaculture industry focused on production of this species by improving production efficiencies and will potentially lead to expansion of this industry.”

<https://seagrant.noaa.gov/Portals/0/Documents/Funding/Sea%20Grant%20Fall%202022%20Aquaculture%20Projects%20List.pdf>

<sup>29</sup> S-K grant, 2014-2015, \$46,058 to Fish Breeders of Idaho, Inc.

<sup>30</sup> S-K grant, 2014-2015, \$288,845 to Texas A&M AgriLife Research

<sup>31</sup> S-K grant, 2014-2105, \$400,000 to Fresh Island Fish Company, Inc.

<sup>32</sup> S-K grant, 2016, \$250,000 to Aquafeed.com, LLC

<sup>33</sup> S-K grant, 2016, \$127,865 to Kampachi Farms LLC (now Ocean Era)

<sup>34</sup> S-K grant, 2018, \$289,480 to Kampachi Farms LLC (now Ocean Era)

<sup>35</sup> S-K grant, 2021, \$265,625 to North Carolina State University

<sup>36</sup> S-K grant, 2020, \$220,000 to Hawaii Feed & Fish Fertilizer, LLC,

<https://media.fisheries.noaa.gov/2021-05/S-K%20FY20%20Summaries.pdf>

<sup>37</sup> S-K grant, 2014-2015, \$336,025 to University of Connecticut

<sup>38</sup> S-K grant, 2014, 2015, \$399,643 to Hubbs Sea World Research Institute

<sup>39</sup> S-K grant, 2018, \$299,990 to University of Illinois

<sup>40</sup> S-K grant, 2021, \$300,000 to University of Florida

<sup>41</sup> S-K grant, 2021, \$295,409 to Oceanic Institute of Hawaii Pacific University

<sup>42</sup> S-K grant, 2014-2015, \$284,203 to Hawaii Pacific University,

[https://media.fisheries.noaa.gov/dam-migration/fy17\\_sk\\_all.pdf](https://media.fisheries.noaa.gov/dam-migration/fy17_sk_all.pdf)

<sup>43</sup> S-K grant, 2018, \$272,622 to University of Hawaii

<sup>44</sup> S-K grant, 2021, \$240,139 to Aquarium of the Pacific and industry trade group Seafood for the Future

grants to companies through several different funding mechanisms, ballooning the overall figure of money going toward offshore fish farming. Using this multi-pronged approach, the true total amount of funding has been able to stay under the public radar.

### ***Problematic funding in the SBIR program***

The [Small Business Innovation Research \(SBIR\) program](#) awards grants to “domestic small businesses to engage in Federal Research/Research and Development (R/R&D) with the potential for commercialization.” Insofar as it relates to aquaculture research, these programs are primarily co-managed by the USDA, NOAA, or DOE. Between 2012-2022, roughly **\$22.7 million** was awarded to companies to develop technologies and products to benefit offshore finfish farmers. If looking at just the amount of money awarded since 2017, that figure is nearly **\$15.7 million**.

The eligibility requirements of what constitutes a “domestic small business” under this grant program may raise some eyebrows. Under [13 CFR 121.702](#), requirements include that these companies be no greater than 500 employees, over 50% owned by U.S. interests, and yet “an awardee may be owned and controlled by more than one VC, hedge fund, or private equity firm so long as no one such firm owns a majority of the stock.”<sup>45</sup> In other words, the company can be made up primarily or exclusively of these kinds of corporations, so long as no single one of them breaks the 50% figure on its own.

This is why there are so many examples of SBIR grants going to biotechnology, pharmaceutical, aquafeed, and offshore aquaculture companies.<sup>46</sup> And, [a 2020 \\$600,000 grant](#) to (again) Ocean Era to explore whether it can successfully farm mahi mahi. In fact, SBIR grants from the period of 2017-2022 for this company alone totalled \$1.1 million. The federal government’s consistent dedication to assist Ocean Era via all possible funding avenues, especially given the company’s track record, is deeply troubling.

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<sup>45</sup> See Small Business Innovation Research, About page, available at: <https://www.sbir.gov/about>

<sup>46</sup> For a small subset of examples, see the following summaries:

<https://techpartnerships.noaa.gov/wp-content/uploads/2022/01/FY2020-Abstracts-Phase-I.pdf>;

[https://techpartnerships.noaa.gov/wp-content/uploads/2022/01/FY2020Abstracts\\_PhaseII.pdf](https://techpartnerships.noaa.gov/wp-content/uploads/2022/01/FY2020Abstracts_PhaseII.pdf);

<https://techpartnerships.noaa.gov/wp-content/uploads/2022/01/FY2021-Abstracts-Phase-I.pdf>;

[https://techpartnerships.noaa.gov/wp-content/uploads/2022/01/FY2021Abstracts\\_PhaseII.pdf](https://techpartnerships.noaa.gov/wp-content/uploads/2022/01/FY2021Abstracts_PhaseII.pdf);

[https://portal.nifa.usda.gov/lmd4/recent\\_awards?report\\_title=Recent%20Awards&from\\_site=NIFA&search\\_label=Awards%20Listing](https://portal.nifa.usda.gov/lmd4/recent_awards?report_title=Recent%20Awards&from_site=NIFA&search_label=Awards%20Listing)

### ***Assessing the overall damage in problematic funding***

Erring on the side of a conservative estimate, by limiting our review to simply the grant money allocated since the year 2017, the funds directed toward assisting the offshore fish farming industry are as follows:

- NOAA Sea Grants: \$16.21 million
- NMFS Saltonstall-Kennedy Grants: \$4.34 million
- SBIR Grants (NOAA, USDA, DOE): \$15.74 million

This is a grand total of **\$36.3 million being awarded to projects (from 2017-2022) that benefit the offshore fish farming industry**, via these 3 funding streams alone. Our members, who collectively represent 4.3 million people in the United States, believe that this is a massive waste of public resources, and amounts to little more than the federal government prioritizing the desires of corporate shareholders over the needs and wants of the U.S. public.

### **NOAA fails to properly evaluate environmental impacts and cumulative effects**

When considering that NOAA has consistently advocated for funding offshore fish aquaculture for decades, and that the assessment of physical, biological, and socioeconomic impacts – as well as cumulative impacts/effects – is so poorly done, we can come to no other conclusion than that the assessment intentionally obscures true concerns.

First, NOAA relies on conflating all of its aquaculture projects into one general category, as if investing money to study ocean acidification's impacts on shellfish were the same thing as a "development" grant to an offshore fish farm company.

In PEA 4.6, the agency spends two paragraphs addressing cumulative effects. While it admits, rightfully, that "analyzing cumulative effects at a programmatic level is more challenging," it nonetheless determines that the Proposed Action described in this PEA "may have minor to moderate impacts." Yet the agency believes that these impacts "are expected to have short-term, indirect cumulative effects because all of the funded activities covered by this PEA have a short duration, limited by the time frame prescribed in each individual award."

This logic is flawed. It is one thing for university awardees to conduct a distinct and time-bound experiment, where there are indeed minimal long-term impacts once the experiment is completed and the area is restored. But, when we consider that many of these grants assist in disseminating corporate propaganda or directly aid these factory fish farms in getting a foot-hold in public waters (e.g., through permitting assistance or money to conduct more

broodstock research), it is foolish to assume that the benefits derived by these companies simply end at the conclusion of the funding cycle. Indeed, “in accordance with NEPA,” this PEA should “consider the incremental effects of the Proposed Action alternative when added to other past, present, and reasonably foreseeable future actions.” (PEA 4.6) Funding factory farms in the ocean through these grants means that the agency should understand that it is directly responsible for actualizing these companies’ publicly-stated plans to scale up pilot projects by ten-fold or more.

The PEA’s Table 4.2, which summarizes the environmental impacts of Alternative 1 and Alternative 2, fails to subdivide the categories into useful information of whether it is research, for example in seaweed genetics or finfish genetics. This conflation renders the analysis useless. Strikingly, the PEA boldly concludes that *the no-action alternative would cause adverse, long-term, and minor to moderate impacts* across physical, biological, and socioeconomic factors.

In PEA 4.8, the agency attempts to back up its determination. It concludes that its “analysis of the No Action alternative revealed the potential for minor to moderate long-term adverse impacts on all resources because the lack of funding aquaculture research and development projects, would prevent gains in scientific knowledge used to develop sustainable aquaculture.” This is astounding. In other words, in an environmental assessment that looks at physical, biological, and socioeconomic factors, the agency believes that doing nothing would actively harm us all due to ill-defined and purported “gains in scientific knowledge used to develop sustainable aquaculture.”

And what of Alternative 2, the preferred alternative of the agency where all of its projects are funded, including those that even the general public knows cause great harm? Here, the agency frequently describes adverse impacts as “short-term,” “negligible” and “indirect.” Where it does admit “minor to moderate” harm, it then counters that there are alleged “beneficial” impacts. In PEA 4.3, the agency extrapolates on its unconvincing argument that mitigation measures and best management practices will counter any unwanted ill-effects. This leads it to conclude: “Examination of the Proposed Action alternative revealed that none of the project types have the potential for significant impacts.” (PEA 4.8)

The low quality of this analysis, and the clear effort to backfill supporting arguments to support predetermined conclusions leaves our entire membership sorely disappointed, and with little confidence in the agency’s abilities moving forward.

## Conclusion

**Our members support Alternative 1, the No Action Alternative, and urge that NOAA overhaul how it makes determinations on its aquaculture funding decision-making.** Contrary to the agency's assertion of alleged benefits and harms of various awards, our members maintain that every grant made to a company or academic institution that furthers the goals of the offshore fish farming industry is a grant *against* the public interest. Great harm has arisen from the **\$36.3 million that was awarded to projects from 2017-2022 that benefitted (and continue to aid) the offshore fish farming industry.**

Our members object to the factory farming of our oceans, and instead **support fishing and aquaculture that operates within our values of community-driven, community-supported, and responsibly-managed.** Indeed, these values-based forms of aquaculture warrant the agency's serious consideration when it comes to aquaculture programs that deserve funding.

Sincerely,

James Mitchell  
Legislative Director  
Don't Cage Our Oceans