AGENDA REQUEST

AGENDA HEADING: New Business
COMMISSION MEETING DATE: February 3, 2020
AGENDA ITEM NO: XIV.1.

BY City Manager
Thomas Barwin
Mayor Ahearn-Koch

Originating Department

Department Head

Presenter

SUBJECT:
Approval Re: Letter Opposing the Marine Aquaculture Facility in the Gulf Of Mexico

COMMISSION PRIORITIES:

Quality of Life

EXPLANATION:
Per the request of Mayor Ahearn-Koch, attached is a draft letter of opposition for submittal to the Environmental Protection Agency (EPA) regarding Kampachi Farms, LLC's proposal to place a marine net-pen aquaculture facility 45 miles southwest of Sarasota. The EPA is accepting public comments through February 4, 2020. Attached is back-up information and the draft letter for City Commission review and consideration. The detailed permit application documents for this facility can be found at https://go.usa.gov/xda3w under Related Documents.

ADMINISTRATION'S RECOMMENDATION:
Authorization for Mayor to execute and submit the letter to the Environmental Protection Agency (EPA) opposing the Marine Aquaculture Facility in the Gulf Of Mexico

APPROVAL SUMMARY:

<table>
<thead>
<tr>
<th>Approval</th>
<th>Required</th>
<th>Date Completed</th>
<th>Completed By</th>
<th>Status</th>
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<tr>
<td>Department Head Approval</td>
<td>Y</td>
<td>01/30/2020</td>
<td>Marlon Brown</td>
<td>APPROVED</td>
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<td>Deputy City Manager Approval</td>
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<td>01/30/2020</td>
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<td>01/30/2020</td>
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<tr>
<td>City Auditor and Clerk Approval</td>
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<td>01/30/2020</td>
<td>Lori Rivers</td>
<td>APPROVED</td>
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</table>
## AGENDA REQUEST

### ADDITIONAL EXPLANATION:

<table>
<thead>
<tr>
<th>FUNDING SOURCE:</th>
<th>AMOUNT:</th>
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### HOUSING IMPACT (Per House):

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### SUPPORT DEPARTMENTS:

City Manager - Thomas Barwin

### AGENDA DISPOSITION

**COMMISSION ACTION:**

Final Action Motion: 

Motion By: _______________________________  Second By: _______________________________

Vote: 

2
January 30, 2020

Mr. Kip Typer, Environmental Engineer, U.S. EPA
U.S. Environmental Protection Agency
Region 4, Water Division, NPDES Permitting Section
61 Forsyth Street S.W
Atlanta, Georgia 30303-8960

RE: Permit # FL0A00001 - Draft National Pollutant Discharge Elimination System Permit for
Kampachi Farms, LLC

Dear Mr. Tyler:

This letter is in reference to the Environmental Protection Agency’s (EPA) notice of proposed issuance of a national pollutant discharge elimination system permit to Kampachi Farms, LLC in the Gulf of Mexico, 45 miles southwest of Sarasota, Florida. Thank you for recognizing the significant public importance of this project and for your efforts in gathering input during the hearing on January 28, 2020 at Mote Marine Laboratory.

Please accept this letter on behalf of the Sarasota City Commission as our strong and formal opposition to this project.

Our region is extremely sensitivity to Red Tide. Substantial scientific studies link excess nitrogen and phosphate to the growth of harmful algal blooms which fuel Red Tide. Adding nitrogen and phosphate to our warm Gulf waters is too risky and dangerous, even on a trial basis. As stated in the public notice, this permit would authorize the discharge of industrial wastewater from a marine net-pen aquaculture facility to raise 20,000 Almaco Jack and produce up to an 88,000-pound harvest. The nitrogen waste generated from the feces of the fish in a confined system in the warm Gulf waters, in addition to the 27,268 pounds of feed needed per month, will impact our ever-fragile Gulf ecosystem. The most recent red tide outbreak in 2018 had a devastating impact on our coast - not only on the quality of life of our residents and tourists, but also environmentally and economically. The economic impact alone is estimated at $96.4 million.

As elected officials, we must protect the health, welfare, and safety of our constituents. The proposed permit for Kampachi Farms, LLC is not consistent with our duty and our goals.

The City supports the pursuit of aquaculture, where it makes sense as a way to minimize the dependence on imported seafood, yet we object to the experimental nature of this project based on the facts provided.

Should you have any further questions, please feel free to reach out to me at any time.

Thank you,

Jen Ahearn-Koch
Mayor, City of Sarasota
NPDES #: FL0A00001

PERMITTEE: Kampachi Farms, LLC
PO Box 4239
Kailu-Kona HI 96740

FACILITY: Velella Epsilon

FACILITY TYPE: Aquatic Animal Production (SIC code 0273)

OUTFALL: 001

RECEIVING WATER: Federal Waters of the Gulf of Mexico

1. Facility Description

The Velella Epsilon project is a “net-pen” aquatic animal production facility that is considered a new discharge.\(^1\)\(^1\) The project will culture a single cohort of approximately 20,000 fish (kampachi; *Seriola rivoliana*) which will be reared for approximately 12 months. The estimated final fish size is approximately 4.4 pounds (lbs) (2 kilograms [kg]), meaning the total maximum harvest weight is estimated to be approximately 88,000 lbs (39,916 kg). The maximum amount of feed is estimated to be 27,268 lbs (12,369 kg) per month.

The operation consists of a supporting tender vessel and a single floating net-pen cage in water depth of approximately 130 feet (40 meters). The net-pen will be a copper alloy mesh submersible circular cage with a diameter of 17 meters and a height of 7 meters, contained within a high-density polyethylene frame. A single CopperNet submersible fish pen will be deployed on an engineered multi-anchor swivel (MAS) mooring system. The engineered MAS will have up to three anchors for the mooring, with a swivel and bridle system. The cage material for the proposed project is constructed with rigid and durable materials (copper mesh net). The mooring lines for the proposed project will be attached to a floating cage that will rotate in the prevailing current direction. The ocean currents will maintain the mooring rope and chain under tension during most times of operation.

The CopperNet cage design is flexible and self-adjusts to suit the constantly changing wave and current conditions. As a result, the system can operate floating on the ocean surface or submerged within the water column of the ocean. When a storm approaches the area, the entire cage array can be submerged by using a valve to flood the floatation system with water. A buoy remains on the surface, marking the net-pen’s position and supporting the air hose. When the pen approaches the bottom, the system can be maintained several meters above the sea floor. The cage system is still able to rotate around the MAS and adjust to the currents while it is submerged. After storm events, the cage system is made buoyant to resume normal operational conditions.

2. Industry Description

National Pollutant Discharge Elimination System (NPDES) permits protect water quality by regulating point source discharges. Point sources are operations that discharge pollutants from any discernable, confined, and discrete conveyance (40 CFR § 122.2). Net-pen systems are a stationary, suspended, or floating system of nets, screens, or

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\(^1\) In accordance with 40 CFR § 122.2, a new discharger is defined as a facility that has a discharge of pollutants commencing after August 13, 1979, is not a “new source,” and has never received an effective NPDES permit. The proposed facility is not considered a new source because the appropriate effluent standards for the aquaculture industry (concentrated aquatic animal production facilities) are not automatically applicable to the proposed facility.
cages that are anchored offshore in open waters of the United States (40 CFR § 451.2(j)). Aquaculture facilities produce and discharge wastes (excess fish feed and fecal material) that contain pollutants (40 CFR § 122.2). Accordingly, marine aquaculture operations are considered point sources that discharge industrial wastewater.

3. Receiving Water Body Description

The effluent discharges into federal waters of the Gulf of Mexico (Gulf) approximately 45 miles (72 km) southwest of Sarasota, Florida. For Clean Water Act (CWA) purposes, federal waters in the Gulf extend seaward from the three nautical mile boundary of each Gulf coastal state, to 200 miles offshore. In the vicinity of the facility, the Gulf is not considered an impaired water pursuant to CWA § 303(d) and is not subject to any total maximum daily load.

Winter months are dominated by south-southwest currents, while spring months are dominated by a north-northeast current. The overall current flow direction off the west Florida coast is predominately in the south-southwest direction. More information about the receiving water body characteristics can be found in the Ocean Discharge Criteria (ODC) Evaluation that is included in the Environmental Assessment (EA).

For marine waters off the coast of Florida, Florida’s water quality standards apply within three nautical miles off the shore. At the present there are no legally applicable water quality standards that apply for federal waters in the Gulf. CWA § 304 requires the EPA to develop aquatic life criteria that accurately reflects the latest scientific knowledge of the impact of pollutants on human health and the environment. Aquatic life criteria are designed to protect both freshwater and saltwater organisms from short-term and long-term exposure and are based on how much of a chemical can be present in surface water before it is likely to harm plant and animal life. The EPA has established recommended marine aquatic life criteria. The CWA § 304(a) recommended criteria are not laws or regulations; they are guidance for states and tribes to use for their waters when developing water quality standards. The CWA § 304(a) criteria have been considered in evaluating potential impacts from the proposed facility and in developing appropriate conditions to ensure that the proposed discharges will not cause unreasonable degradation of the marine environment and will comply with ODC under Section 303 of the CWA and 40 CFR Part 125, Subpart M.

4. Outfall Description

For this Permit, the net-pen effluent (outfall) is considered to be immediately downstream of the midpoint of the cage with the exact geographical location changing as the cage moves with the current. The proposed facility will be placed within an area that contains unconsolidated sediments that are 3 – 10 ft deep (see Table 1). The applicant will select the specific location within that area based on a diver-assisted assessment of the sea floor when the cage and MAS are deployed. The proposed action area is 3,281 feet (1,000 m) radius measured from the center of the MAS.

Table 1: Target Area with 3’ to 10’ of Unconsolidated Sediments

<table>
<thead>
<tr>
<th>Location</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Left Corner</td>
<td>27° 7.70607’ N</td>
<td>83° 12.27012’ W</td>
</tr>
<tr>
<td>Upper Right Corner</td>
<td>27° 7.61022’ N</td>
<td>83° 11.65678’ W</td>
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<tr>
<td>Lower Right Corner</td>
<td>27° 6.77773’ N</td>
<td>83° 11.75379’ W</td>
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<td>Lower Left Corner</td>
<td>27° 6.87631’ N</td>
<td>83° 12.42032’ W</td>
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5. Rationale for the Permit Conditions and Requirements

The Permit conditions are consistent with and based on the CWA § 402, CWA § 403, and all applicable implementing regulations at 40 Code of Federal Regulations (CFR). The rationale for each part of the Permit is provided below.
Permit Part I – Schedule of Submissions

The schedule of submissions is included to provide a summary of the important submittals that are included within the Permit.

Permit Part II – Monitoring Requirements

The Permit requires water quality, sediment, and benthic monitoring. The monitoring conditions are based on the ODC for NPDES permits (40 CFR § 125.123(a) and 40 CFR § 125.123(d)(2)) and the EPA recommended aquatic life criteria for marine organisms (CWA § 304(a)). Additionally, the monitoring requirements from the concentrated aquatic animal production (CAAP) facility effluent limitation guidelines (ELGs) (40 CFR § 122.24 and 40 CFR Part 451 – Subpart B) are included based on best professional judgement (BPJ) in accordance with 40 CFR § 125.3. See Section 7 for more information on BPJ and the rational for including the CAAP ELGs. See the reasonable potential analysis (section 6), and ODC Evaluation (section 8.2) for additional information. Table 2 provides the monitoring requirements that are included in the Permit.

Permit Part III – Reporting, Monitoring, and Record Requirements

The aquaculture specific reporting requirements are based on reporting that is required by the ELGs for the CAAP Point Source Category (40 CFR § 451.3) and includes requirements related to the use of drugs or other chemicals, structural failure or damage to the facility, and spills of feed, drugs, pesticides, or other chemicals. While this facility is not automatically covered under the CAAP requirements, it is the permit writer’s BPJ (40 CFR § 125.3) that the aquaculture specific reporting requirements be implemented due to the similarity of operational characteristics between the facility covered by this Permit and net-pen facilities that are considered CAAP operations. See Section 7 for more information regarding the BPJ determination and the applicability of the CAAP requirements.

The NPDES electronic reporting requirements for monitoring records are included in the Permit in accordance with the CWA and its implementing regulations at 40 CFR § 122.41(l)(4)(i) and 40 CFR Part 127. See EPA’s web-based NetDMR internet application contains more information electronic reporting requirements (https://netdmr.epa.gov).

Permit Part IV – Best Management Practices

The Permit requires the implementation of best management practices (BMPs) and a BMP plan to prevent or minimize the discharge of wastes and pollutants to the receiving water body and to ensure disposal of wastes in such a way as to minimize negative environmental impacts and comply with relevant solid waste disposal regulations. The BMPs and the BMP plan requirements included in this Permit are based on the effluent limitation guidelines for the CAAP point source category (40 CFR § 122.24 and 40 CFR Part 451– Subpart B) due to the similarity of operational characteristics between the facility covered under this Permit and the net-pen operations considered CAAP facilities. The BMPs and BMP plan are included in the Permit in accordance CWA § 402(a)(1), 40 CFR § 122.44(k)(4), CWA § 403, 40 CFR § 125.123, and the BPJ of the permit writer (40 CFR § 125.3). Further information about BMPs and plans applicable to the net-pen aquaculture industry are available in the CAAP effluent limit develop document and the CAAP Compliance Guide.

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### Table 2: Summary of Monitoring Requirements

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<tr>
<th>Parameter</th>
<th>Units</th>
<th>Parameter Code</th>
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<th>Average Monthly</th>
<th>Location</th>
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<th>Sample Type</th>
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<td>Current measurements</td>
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<td>BT1</td>
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<td>Benthic macroinvertebrates</td>
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<td>SD1, SD2, SD3</td>
<td>Biomass based</td>
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#### Permit Part V – Environmental Monitoring

The Permit requires environmental monitoring and implementation of an environmental monitoring plan (EMP) to meet the requirements of the CWA § 402 and CWA § 403. The EPA completed an ODC Evaluation and determined that sufficient information exists to conclude that the discharge from the facility would not cause unreasonable degradation of the marine environment in accordance with 40 CFR § 125.123(a) and 40 CFR § 125.123(d). The EMP within the Permit meets the requirements 40 CFR § 125.123(d)(2) which allows the EPA to “specify a monitoring program, which is sufficient to assess the impact of the discharge on water, sediment, and biological quality including, where appropriate, analysis of the bioaccumulative and/or persistent impact on aquatic life of the discharge.” (40 CFR § 125.123(d)(2)).
Permit Part VI – Facility Damage Prevention and Control

The Permit requires implementation of Facility Damage Prevention and Control (FDPC) practices and a FDPC Plan to ensure that the facility has procedures in place for the prevention and mitigation of natural and man-made disasters. The Permittee is required to develop practices and follow the FDPC Plan which prescribes the facility-specific procedures for dealing with fish/aquatic life containment and transfer, disaster prevention practices, and disaster cleanup. The FDPC requirements within the Permit are based on the reporting requirements found in 40 CFR § 451.3(b) and 40 CFR § 451.21 (c), (d), and (f). The requirement to implement FDPC practices and plan are in accordance with CWA § 402(a)(1), 40 CFR § 122.41(e), CWA § 403, 40 CFR § 125.123(d)(3), and 40 CFR § 125.3.

Permit Part VII – Quality Assurance

The Permit requires the implementation of quality assurance procedures and submittal of a quality assurance project plan (QAPP) to ensure that the water quality data collected by the Permittee is reliable. The QAPP is designed to support sample collection and analysis objectives, document representative sampling conditions of all monitoring activities, and document data anomalies at the facility, in the effluent, and in the receiving water body. The implementation of quality assurance procedures and the requirement to submit a QAPP are included in the Permit in accordance CWA § 402(a)(1), 40 CFR § 122.41(e), 40 CFR § 122.41(j), 40 CFR § 125.3 (see section 6 for more information regarding EPA’s BPJ determination), CWA § 403, and 40 CFR Part 125, Subpart M.

Permit Part VIII – Standard Conditions

This section of the Permit contains the general conditions and definitions applicable to NPDES permits issued by the EPA and are established in 40 CFR § 122.41.

6. Reasonable Potential Analysis

The NPDES implementing regulations require limitations for all pollutants or pollutant parameters that are discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion of a water quality standard (40 CFR § 122.44(d)). A reasonable potential analysis is the process used to determine whether a discharge, under a certain set of facility-specific conditions, could cause or contribute to an excursion of an applicable water quality standard. Due to the location of the facility within federal waters of the Gulf, there are no applicable water quality standards that apply to marine waters seaward of the Florida state water boundary (seaward of three (3) nautical miles). However, in order to ensure that the discharge does not cause unreasonable degradation of the marine environment, as required by CWA § 402 and 40 CFR Part 125, Subpart M (Ocean Discharge Criteria), the CWA § 304(a) criteria were used in a manner similar to a reasonable potential analysis for this facility.

The EPA worked with the National Oceanic and Atmospheric Administration (NOAA) to conduct environmental quantitative modeling at the proposed project site. Given that the facility is new, actual effluent and receiving water body water quality information was not available. Appropriately representative effluent feed characteristics from similar marine aquaculture facilities were used as modeling inputs as part of the analysis. Physical water characteristics from the Gulf were obtained from a previous EPA study and more recently from a NOAA buoy.

A numerical production model for two cohorts of fish was constructed based upon anticipated farming parameters including configuration (net-pen volume and mooring configuration), fish production (species, biomass, size), and feed input (feed rate, formulation, content). Using aquaculture industry standard equations, daily estimates of

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5 Current data were obtained from NOAA Buoy Station 42022 along the 50-m isobath and located 45 miles northwest of the project location (27.505 N, 83.741 W). Currents were recorded continuously from July 2015 through April 2018. Currents were measured at 1-meter intervals from 4.0 meters to 42.0 meters below the surface. Bathymetric data were obtained from the NOAA Coastal Relief Model.
biomass, feed rates, total ammonia nitrogen production, and solids production were developed under a production scenario to estimate the maximum biomass of 20,000 fish (88,000 lbs) throughout the production lifecycle. The maximum daily excretion of total ammonia nitrogen produced is estimated at 36 lb/d (16 kg/d) for a total of approximately 2,745 kg (6,052 lbs) of ammonia nitrogen produced during the anticipated fish production cycle. The maximum daily solids production is estimated at 140 kg (309 lbs). The report estimated that ammonia nitrogen will be undetectable within 30 meters of the cage at the typical flow regimes in the vicinity of the proposed site. In addition, the calculated flow-averaged total ammonia concentration at the cage/water interface is below EPA’s published ammonia saltwater criteria of 3.5 x 10^{-2} milligrams per liter (mg/L) (4-day average) and 2.33 x 10^{-1} mg/L (1-hour average). See the ODC Evaluation in Appendix A of the draft EA for more information on these calculations.

A solids deposition model (DEPOMOD) was used to determine the environmental impact of this facility on the surrounding sea floor and benthic community. The depositional model was executed for two different production simulations that assume maximum biomass and maximum feed rate for the entire production cycle; therefore, the model predicts the worst-case scenario. The first simulation represented the maximum standing biomass for the proposed facility. The model was run for 365 days assuming a net-pen with a constant maximum biomass and a daily feed rate of 1.1 percent of biomass. The second simulation doubled production to assess sediment related impacts at higher levels of biomass and feed rates. Under the second simulation, the model was run for 365 days assuming two net-pens each with a combined constant daily standing biomass at 72,550 kg (28 kg/m^3 per net-pen).

The results of the deposition model predict that net organic carbon accumulation would be at 3.0 grams per meter squared per year (g/m^2/yr) or less for 99.7 percent of the test grid area, at the estimated worst-case maximum production values. When doubling the estimated production values, net organic carbon accumulation would be 5.0 g/m^2/yr or less for 99.0 percent of the grid. Even with doubling the estimated production values, the model predicts that the net accumulation of particulate wastes following a 1-year production cycle would likely not be distinguishable from background levels through measurement of organic carbon.

To meet the Permit requirements for the ODC (40 CFR §§ 125.123(a) & (d)(2)) the water quality parameters listed in Table 2 are included in the Permit; however, due to the lack of demonstrated reasonable potential to cause or contribute to an exceedance of these parameters, all water quality, sediment, and benthic parameters will be monitor and report only.

7. **Best Professional Judgement**

The proposed facility will commence construction after promulgation of national standards of performance for CAAP facilities set forth at 40 CFR Part 451; however, those standards do not automatically apply to facilities producing less than 100,000 lbs of warm water aquatic animals annually. Where the EPA has not promulgated technology-based effluent guidelines for a particular class or category of industrial discharger, EPA must establish technology-based effluent limitations on a case-by-case basis based on BPJ. Technology-based limits constitute a minimum level of controls that must be included in a NPDES permit. The EPA establishes such limitations pursuant to its authority under CWA § 402(a)(1) which authorizes the EPA to include in permits “such conditions as the Administrator determines are necessary to carry out the provision of [the CWA]” in accordance with 33 USC § 1342(a)(1)(B).

The EPA used several factors in setting BPJ limitations pursuant to 40 CFR § 125.3. First, the proposed facility’s maximum annual production of 88,000 lbs is relatively close to the 100,000 lbs threshold for which the CAAP effluent limit guidelines are automatically applicable for warm water aquatic species. Second, the discharge and operational characteristics of the facility covered by this Permit are substantially similar to the marine aquaculture facilities covered by the effluent limit guidelines for the CAAP facility. Finally, the proposed facility will be the first marine net-pen aquaculture facility to operate and discharge in the eastern Gulf. The EPA has determined that implementation of the CAAP conditions should not be overly burdensome and should pose minimal economic hardship to the permittee.
Further authority for the Permit conditions is provided by CWA § 403 and the ODC (40 CFR Part 125, Subpart M), because these conditions help ensure that the discharges will not cause unreasonable degradation of the marine environment.

8. Compliance with Other CWA Requirements

8.1 CWA § 401 Certification
Under CWA § 401, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the United States until the state or tribe where the discharge originates has granted or waived Section 401 certification. Based on a review of the application and other relevant information, including the location and nature of the proposed discharge, the EPA has determined that a Section 401 certification is not required as the proposed discharge will not affect the water quality of any neighboring state or tribal waters.

8.2 CWA § 403 (Ocean Discharge Criteria)
All CWA § 402 permitted discharges into the territorial sea, the waters of the contiguous zone, or the oceans must be consistent with the ODC pursuant to the CWA § 403. Consequently, NPDES permits can require any necessary limits that are consistent with EPA’s ODC. The implementing regulations of the ODC (40 CFR Subpart M) “establishes guidelines for issuance of NPDES permits for the discharge of pollutants from a point source into territorial sea, the contiguous zone and the oceans” to prevent unreasonable degradation of the marine environment. Unreasonable degradation of the marine environment is defined in 40 CFR § 125.121(e) as the following:

1. Significant adverse changes in ecosystem diversity, productivity and stability of the biological community within the area of discharge and surrounding biological communities
2. Threat to human health through direct exposure to pollutants or through consumption of exposed aquatic organisms, or
3. Loss of aesthetic, recreational, scientific or economic values which is unreasonable in relation to the benefit derived from the discharge.

The EPA completed an ODC Evaluation and determined that sufficient information exists to conclude that the point source discharge from the marine aquaculture facility covered by this Permit would not cause unreasonable degradation of the marine environment in accordance with 40 CFR § 125.123(a). More information about the ODCE Evaluation can be found in Appendix C of the draft EA.

9. Compliance with Other Applicable Federal Laws

Additional information regarding other applicable Federal laws can be found in the draft EA prepared by the EPA with cooperating agency support from the U.S. Army Corps of Engineers (USACE) and the National Marine Fisheries Service (NMFS).

9.1 Coastal Zone Management Act
Under the Coastal Zone Management Act (CZMA), federal agency activities that have coastal effects must be consistent to the maximum extent practicable with federally approved enforceable policies of a State’s coastal management program (CMP). The CZMA’s implementing regulations in 15 CFR Part 930 require that any federally permitted activity affecting the coastal zone of a state that has an approved CMP be reviewed by that state for consistency with the state’s program. Additionally, the implementing regulations for the CWA prohibit the EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State CMP, and the state concurs with the determination (40 CFR § 122.49(d)).

On January 3, 2019, the permit applicant submitted a CZMA consistency determination to the Florida State Clearinghouse with the Florida Department of Environmental Protection. On January 15, 2019, the Florida

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6 The CWA § 403(a) states that a NPDES permit can not be issued for discharges into the territorial sea, the waters of the contiguous zone, or the oceans except in compliance with the guidelines for the determination of degradation of those waters.
Department of Agriculture and Consumer Services (FDACS) documented that the coastal consistency
determination submitted by the applicant was consistent with all FDACS statutory responsibilities for aquaculture.
On February 18, 2019, the Florida Fish and Wildlife Conservation Commission (FWC) found that the applicant’s
coastal consistency determination was consistent with Florida’s’s CMP. Therefore, the EPA has determined that the
action covered by this permit is consistent with the CZMA and its implementing regulations.

9.2  Endangered Species Act
In accordance with the Endangered Species Act (ESA) § 7, interagency consultation and coordination with the
NMFS and the U.S. Fish and Wildlife Service (USFWS) is required to insure that any action authorized, funded, or
acted upon by a joint agency is not likely to jeopardize the continued existence of any listed species or result in
the destruction or adverse modification of any designated critical habitat (ESA § 7(a)(2)); and confer with the NMFS
and USFWS on any agency actions that are likely to jeopardize the continued existence of any species that is
proposed for listing or result in the destruction or adverse modification of any critical habitat proposed to be
designated (ESA § 7(a)(4)). Additionally, the implementing regulations for the CWA related to the ESA require the
EPA to ensure, in consultation with the NMFS and USFWS, that “any action authorized by EPA is not likely to
jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat”
(40 CFR § 122.49(c)).

The EPA determined that the discharge authorized by the NPDES permit will have “no effect” on any federally
listed species, proposed species, or critical habitat for sea birds that are under the jurisdiction of the USFWS and
within the proposed action area. Regarding federally listed species, proposed species, or critical habitat under the
jurisdiction of the NMFS, the EPA determined that the discharges authorized by the NPDES permit “may affect,
but not likely to adversely affect” certain fish, invertebrates, marine mammals, and reptiles within the proposed
action area. On August 12, 2019 EPA provided the ESA assessment to the NMFS and initiated abbreviated
consultation with the NMFS. On August 13, 2019 EPA provided the ESA assessment to the USFWS and initiated
abbreviated consultation with the USFWS. Consultation will occur during the public comment period. It is
anticipated that the consultation will be completed prior to the issuance of the EPA’s NPDES permit. Completion
of the informal consultation with the USFWS and NMFS will satisfy the EPA’s obligations under ESA § 7(a)(2).

9.3  Fish and Wildlife Coordination Act
The Fish and Wildlife Coordination Act (FWCA) requires that Federal agencies consult with the USFWS, the
NMFS, and State wildlife agencies for activities that affect, control or modify waters of any stream or bodies of
water, in order to minimize the adverse impacts of such actions on fish and wildlife resources and habitat. The
FWCA establishes fish and wildlife conservation as an objective of all Federally funded, permitted, or licensed
water-related development projects. The FWCA states that the consultation purpose is for “preventing loss and
damage to wildlife resources.” Federal action agencies developing water-related projects are to include justifiable
means and measures to benefit and reduce impacts to fish and wildlife, and mitigation and enhancement
recommendations are to be given full and equal consideration with other project purposes. Additionally, the
implementing regulations for the CWA related to the FWCA require the EPA to consult with the USFWS and
NMFS, and the appropriate state agency exercising jurisdiction over wildlife resources to conserve those resources,
before issuing a permit proposing or authorizing the impoundment (with certain exemptions), diversion, or other
control or modification of any body of water (40 CFR § 122.49(c)).

The EPA is not permitting any loss or damage to wildlife resources and has conducted environmental and wildlife
consultations or evaluations as documented throughout this fact sheet; therefore, the EPA does not anticipate any
impacts resulting in substantial modifications to the receiving water body. During the public notice of this permit,
the USFWS and NMFS will be consulted with to ensure compliance with the FWCA.

9.4  Magnuson-Stevens Fishery Conservation and Management Act
The Essential Fish Habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act
(MSA) sets forth a mandate to identify and protect important marine habitat. Pursuant to the MSA § 305(b), federal
agencies are required to consult with NMFS on any action that may result in adverse effects to EFH or habitats of
particular concern. Federal action agencies which fund, permit, or carry out activities that may adversely affect EFH are required to consult with NMFS regarding the potential impacts of their actions on EFH and respond in writing to NMFS recommendations. EFH is defined as the water and substrate necessary for fish spawning, breeding, feeding, and growth to maturity.

The EFH assessment determined that the minimal short-term impacts associated with the discharge will not result in substantial adverse effects on EFH, habitats of particular concern, or managed species within the facility area. Based on the EFH assessment, the EPA will require mitigation measures to be incorporated into the NPDES permit to avoid or limit organic enrichment and physical impacts to habitat that may support associated hardbottom biological communities. The NPDES permit contains a condition that the facility must be positioned at least 500 meters from any hardbottom habitat.

An EFH assessment was prepared by the EPA and the United States Army Corps of Engineers (USACE). On March 8, 2019, the EPA provided the EFH assessment to the NMFS and initiated abbreviated consultation with the NMFS. On March 12, 2019, the NMFS concurred with the EFH determination made by the EPA and the USACE. After completion and concurrence of the assessment, minor changes were made to the EFH document, though the updates did not change the findings of the assessment. On August 2, 2019 EPA provided the updated EFH assessment to NMFS for concurrence. Consultation with NMFS on these changes will occur during the public comment period. It is anticipated that the consultation will be completed prior to the issuance of the EPA’s NPDES permit. Completion of the abbreviated consultation with NMFS will satisfy the EPA’s obligations under MSA § 305(b)(2). More information about the EFH consultation including the assessment and consultation coordination documents are provided in Appendix E the draft EA.

9.5 National Environmental Policy Act
The EPA prepared a draft EA to support the draft NPDES permit pursuant to its authority under the Policy for Voluntary Preparation of National Environmental Policy Act (NEPA) documents (63 Federal Register 58045, 10/29/98) and consistent with the requirements at 40 CFR § 6.205(a). On April 8, 2019, the draft EA was authorized for release by the Responsible Official (Regional Administrator). The draft EA also supports the USACE Section 10 permit.

9.6 National Historic Preservation Act
Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR Part 800) require Federal agencies to take into account the effects of their activities on historic properties. Additionally, the EPA must adopt measures when feasible to mitigate potential adverse effects of the licensed activity on properties listed or eligible for listing in the National Register of Historic Places before issuing a NPDES permit (40 CFR § 122.49(b)). NHPA’s requirements are to be implemented in cooperation with state historic preservation officers (SHPO) and upon notice to, and when appropriate, in consultation with the Advisory Council on Historic Preservation.

During the interagency permitting process for the proposed project the applicant coordinated with the Florida SHPO to ensure compliance with NHPA. On January 3, 2019, the applicant submitted a NHPA consistency determination to the Florida State Clearinghouse with the Florida Department of Environmental Protection. On February 8, 2019, the Florida SHPO found that the proposed project will not affect historic properties if the facility anchors are placed within 50 feet of the surveyed lines on the seafloor. The Florida SHPO also recommended that the permit include a “unexpected discovery protocol” condition.” The appropriate permitting agency with jurisdictional oversight for an unexpected discovery protocol permit provision is the USACE; the USACE will include this provision within their Section 10 permit.

The “unexpected discovery protocol” provision recommended by the Florida SHPO states “In the event that any project activities expose potential prehistoric/historic cultural materials not identified during the remote-sensing survey, operations should be immediately shifted from the site. The respective Point of Contact for regulatory agencies with jurisdictional oversight should be immediately apprised of the situation. Notification should address the exact location, where possible, the nature of material exposed by project activities, and options for immediate archaeological inspection and assessment of the site.”
9.7 **Marine Mammal Protection Act**

The Marine Mammal Protection Act (MMPA) and its implementing regulations (50 CFR Part 216) prohibits the harassment, hunting, capturing, or killing of marine mammals incidental to commercial fishing operations in U.S. waters without a permit from the Secretary of Commerce. The MMPA delegates the NMFS as the authority responsible for the conservation and management of cetaceans (whales, dolphins, porpoises) and pinnipeds (other than walruses). Marine aquaculture facilities are currently considered commercial fishing operations under the MMPA.

Section 118 of the MMPA addresses the incidental capture of marine mammals during commercial fishing operations and establishes the Marine Mammal Authorization Program (MMAP). The MMAP provides an annual exemption for accidentally killing or injuring marine mammals, referred to as incidental take, during commercial fishing activities. The Permittee’s aquaculture facility is not an exempted fishing activity under the MMAP. To comply with of the MMPA Section 118, the Permittee is required to obtain a MMAP certificate that includes reporting any marine mammal injuries to NMFS within 48 hours.

The Permittee partnered with NMFS to develop a protected species monitoring plan (PSMP) to protect marine mammals and collect valuable information about potential interactions between aquaculture operations and protected species. The data collected under the PSMP will help the NMFS determine the appropriate MMAP category that aquaculture facilities should be placed in based on the level of interaction that occurs at the facility. Monitoring under the PSMP will occur throughout the life of the project and represents an important minimization measure to reduce the likelihood of any unforeseen potential injury to all protected species.

9.8 **The Wild and Scenic Rivers Act**

According to 40 CFR § 122.49(a), Section 7 of the Wild and Scenic Rivers Act prohibits the EPA from assisting by license or otherwise the construction of any water resources project that would have a direct, adverse effect on the values for which a national wild and scenic river was established. The proposed project is located in federal waters of the Gulf of Mexico and will not impact any national wild and scenic rivers. Therefore, the Wild and Scenic Rivers Act is not applicable to the proposed facility or the proposed NPDES permit.

10. **Effective Date of Effluent Limits, Permit Conditions, and Compliance Schedule**

The Permittee shall achieve compliance with all monitoring conditions and permit requirements immediately upon the effective date of the Permit. A compliance schedule is not included in this Permit.

11. **EPA Administrative Record and Contact**

The public notice for this draft permit will be published in the Sarasota Herald-Tribune. The entire administrative record including the permit application, draft permit, fact sheet, public notice, comments received, consultations, evaluations, and other supporting information is available by contacting the EPA using the below information. Some of the administrative record is available on the website. The public comment period will be open for 30 days after publication of the public notice. A response to comment document will be drafted and included with the final permit should any significant comments be received.

U.S. Environmental Protection Agency, Region 4  
Permitting and Grants Branch Chief  
Water Division  
61 Forsyth Street SW | Atlanta GA 30303-8960  
404.562.9459 R4NPDESPermits@epa.gov

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8 [www.epa.gov/aboutepa/about-epa-region-4-southeast](http://www.epa.gov/aboutepa/about-epa-region-4-southeast)
Up to three miles offshore from their coastlines, states control aquaculture. Between three to two hundred miles, aquaculture falls under federal control. To date, aquaculture in various state waters has been limited to approximately twenty percent of seafood production for the entire country, being small in scale. Some has been abandoned because of adverse effects.

**To date, commercial aquaculture has not been allowed in federal waters.** Issues have been raised regarding the legality of commercial fish farming in federal waters and—if it were determined to be legal—who would govern and regulate it. The issues have not been resolved as litigation and federal legislative proposals continue.

Nonetheless, a commercial finfish-farming company with existing deep-water projects near Hawaii and in Mexican waters, Kampachi Farms, has applied to the United States Environmental Protection Agency for a permit to conduct a pilot project of finfish farming in U.S. federal waters of the Gulf of Mexico over the shallow continental shelf that extends a hundred miles off the western shore of Florida.

The application for this pilot project is the topic of the public hearing today.

We have consulted several scientists and have researched many topics in order to contribute to the public opinion sought today regarding the application for the proposed pilot project forty or so miles off our shore.

Scientific speculation generally agrees that it is unlikely for the proposed pilot project to yield negative results—because of its small scale.

That small scale also makes it unlikely for the proposed pilot project to be able to provide scientific data that could justify the initiation of commercial finfish farming in federal waters above the shallow shelf along the western coast of Florida.

The proposal has been crafted to include some admirable parameters, such as the species chosen as its proposed subject, as well as recognition of some of the most important factors to be studied about aquaculture of finfish, per se, and the possibility that aquaculture may become an essential source of protein for future populations.

Our research regarding the proposed pilot project has led us to the conclusion that this current proposal is inappropriate for the site, however, we have suggestions for future study.

The proposed pilot project will not contribute any data that could justify a decision for permitting commercial finfish farming along the western coast of Florida. Essentially, it seems a **waste of resources and finances** to proceed with the proposed project and it could **exacerbate existing conditions** that already are threatening to the welfare of our fragile environment, our struggling local fisheries, and our population.

The location of the proposed project is documented as an epicenter of nascent algae bloom incubation. It has been identified as the location of red tide factors that readily may be fed to bloom with the introduction of more nutrients in what already is a delicate balance. It may flare up quickly in great volume and, wreak havoc on our environment and health.

The currents in the gulf are weak, unlike those that can be found away from a continental shelf—in deep-water. Even with our weak currents, a single pen may yield no significant increase in nutrients because of dilution, but a single pen could never be a commercial success and a commercial project would have to include many pens that quickly would exceed a threshold of dilution.

Furthermore, feeding an artificial and stationary population of finfish in that location may attract more of the red tide *K. brevis* algae to that location to flourish. It also may attract additional species to compete for the food being distributed, further concentrating waste nutrients that feed such algae blooms.
Other predators could be attracted to those additional species in great concentrations that enables an unbalanced opportunity to prey upon them. Our existing live-bottom species also would suffer badly.

In natural conditions, the subject species feeds throughout day and night as they circulate widely. Surely, their natural feeding cycle would be broken. Imposing artificial, regulated feeding could disrupt their natural behavior, metabolism, and health.

The subject species is a carnivorous predator, feeding it a vegetarian diet would not provide proper nutrition. Supplementation could be complicated, uncertain, and polluting. Feeding with animal protein presents even more issues, such as decimating other species (either locally or distant) through capture as food or, by their own food source being harvested to feed a “herd”—leaving them to starve.

Concentration of this wide-ranging species that normally lives in fast-moving small groups through varying locations, into stationary pens will be unnatural behavior for the species, make them more subject to parasites, disease, and stress, as well as, putting other species into danger from the parasites, diseases, and concomitant measures the farmers must take to treat or prevent this among their “herd”. The proposed subject finfish are used to natural conditions that help them keep parasites and disease in check. Those conditions will not exist in a pen constraining them and excluding interaction with species that they rely upon for their health (for example, their typical behavior of deliberately rubbing against the rough skin of passing sharks to remove their persistent skin parasites).

The shallow bottom of the gulf along the western Florida shelf is a live environment, not resembling equidistant locations along Florida shores on the eastern coast, where the continental shelf falls away in a relatively short distance and currents consistently are strong. Our shallow Florida shelf already is the habitat of many species needing a healthy environment and is grounds for existing fishing, both recreational and commercial.

The scale required for commercial success with finfish farming on the shallow shelf is certain to exceed the capacity of the currents and environment to remain healthy for it—as well as—for the existing species in that location that we wish to protect.

Proposals to lower the pen during stormy weather further threatens the life on the bottom and, given a hurricane season that extends for more than six months of the study year, the real position of the pen often may be quite different from that of the protocol. Weak currents may fail completely at the storm depth. Data may be so inconsistent that accurate research never could be repeated in scientific fashion.

We are supportive of measured, scientific, and appropriate study of aquaculture.

If commercial aquaculture is determined to be lawful, viable, and healthy on the western shelf of Florida—finfish should not be considered—it needs to be shellfish.

Shellfish would have the advantage of not requiring feeding, nor concern about their biological processes, and—would provide an extra advantage—being a means to restore the waters to healthy conditions through their natural filtering activities in the environment.

The western shelf of Florida is the wrong place for a pilot project of finfish farming. If you are seeking data for consideration about reversing our national ban of offshore aquaculture, we recommend that research be conducted where geographic characteristics might likely support healthy commercial aquaculture of finfish.

Thank you for the opportunity to submit comments and suggestions into this EPA record.

Kafi Benz, president, Sarasota County Council of Neighborhood Associations, Inc. — CONA