Facility Damage Prevention and Control (FDPC) Plan

For the

Velella Epsilon Demonstration Project – Pioneering Offshore Aquaculture in the Southeastern Gulf of Mexico

NOAA Sea Grant 2017 Aquaculture Initiative



Submitted to:

U.S. Environmental Protection Agency (EPA) Region 4
National Pollutant Discharge and Elimination System (NPDES)
Permitting and Enforcement Branch

Prepared by:

Dennis Jay Peters Gulfstream Aquaculture, LLC

Prepared for:

Neil Anthony Sims OCEAN ERA, LLC

November 2024



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Facility Damage Prevention and Control (FDPC) Plan

Facility Name: Velella Epsilon Demonstration Project

Prepared Date: 1 November 2024

NPDES Permit No.: FLOA00001

Facility Manager: Dennis Jay Peters

On October 24th, 2024, EPA made public notification of the proposed issuance of a modified NPDES permit (FLOA00001) for Ocean Era's Velella Epsilon (VE) Demonstration Project (VE Project). In compliance with the requirements of this permit, within 90 days of permit issuance, Ocean Era is responsible for the development, submittal, approval, and implementation of four (4) component plans; Best Management Practices (BMP) Plan, Environmental Monitoring Plan (EMP), Facility Damage Prevention and Control (FDPC) Plan, and a Quality Assurance Project Plan (QAPP). Approval of the plans must occur prior to authorization of any discharge (i.e., stocking of any fish).

The contents of this document comprise the BMP Plan, which outlines the feed management, waste collection and disposal, transport or harvest discharge, carcass and waste removal, material storage, structural maintenance, record keeping, training requirements, pathogen requirements, modification and certification, documentation, and reporting requirements for this BMP Plan. During the period beginning on the effective date and lasting through the expiration date of this permit, Ocean Era is authorized to discharge industrial wastewater from the VE Project (aquatic animal production facility) into the Gulf of Mexico (Gulf) for one production cycle.

1.0 Facility / Project Description

The VE Project proposes to validate the feasibility of a temporary, small-scale, demonstration net pen to stock, culture, and harvest a Federally managed species (Red drum [redfish]; *Sciaenops ocellatus*); conduct environmental monitoring – water quality and benthic analyses per EPA and U.S. Army Corps of Engineers (USACE) requirements; and address public concerns of open ocean aquaculture in the Gulf by (1) demonstrating FAD effects to Gulf fishing communities; and addressing public concerns of open ocean aquaculture in the Gulf by (2) encouraging the public and tourists to visit the demonstration site.

1.1 Species / Annual Production:

The project will culture a single cohort of approximately 20,000 fish (Red drum [redfish]; Sciaenops ocellatus) which will be reared for approximately 12 months. The estimated final fish size is approximately 2.75 pounds (lbs.) (1.25 kilograms [kg]), meaning the total maximum harvest weight is estimated to be approximately 46,750 lbs. (21,250 kg) given a survival rate of approximately 85 percent (%). The maximum total amount of feed is estimated to be 126,210 lbs. (57,368 kg) over the growout period with a maximum monthly feed amount of 16,101 lbs. (7,303 kg).

1.2 Net Pen Configuration / Operation:

The VE Project will utilize a single, PolarCirkel-style, net pen system that consists of an offshore-strength submersible circular pen with a diameter of approximately 25.5 meters (m; 83.7 feet [ft]) and a depth of 3.13 m (10.3 ft) or a total working volume of approximately 1,600 m3 (56,500 ft3), contained within a high-density polyethylene frame. The submersible net pen will be deployed on an engineered, four (4)-point standard grid mooring system. The net pen system will have up to eight (8) anchors and four (4)

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concrete nodes for the mooring. The net pen system utilizes embedment-type anchor moorings; and is serviced by a tender vessel/feed barge tethered to the side of net pen system. The cage material for the proposed project is constructed with flexible, yet durable, monofilament netting material (i.e., KikkoNet mesh net). The mooring lines for the proposed project will be attached to a floating pen that will retain the net pen's position, regardless of the prevailing current and/or wind direction. The four (4)-point grid mooring system will maintain the mooring lines and chain under constant tension during the operation.

The pen design is flexible and self-adjusts to suit the constantly changing wave, wind, and current conditions. As a result, the system can operate floating on the ocean surface or submerged within the water column of the Gulf. When a storm approaches the area, the entire net pen can be submerged by using a valve to flood the a unique, three-chambered buoyancy system with water. A buoy remains on the surface, marking the net-pen's position. When the pen approaches the bottom, the system can be maintained several meters above the sea floor. The net pen system maintains its position while it is submerged. After storm events, the net pen system is made buoyant to resume normal operational conditions. The net pen system is estimated to be constructed and deployed in the June to August 2025 timeframe.

1.3 Location:

The VE Project is located in the Gulf in approximately 40 m water depth off southwest Florida, generally located 45 miles southwest of Sarasota, Florida. **Figure 1** provides the location of VE Project demonstration farm site. The VE Project location was originally sited by conducting a geophysical baseline survey of the proposed area, and whose data were ultimately summarized, reorganized, and augmented to fulfil the requirements of the **Baseline Environmental Survey Guidance and Procedures for Marine Aquaculture Activities in U.S. Federal Waters of the Gulf of Mexico, October 24th, 2016**.

The overall area (**Table 1**) is defined as approximately 1.3 x 1.3 nautical miles (nm; 1.7-square nm-site area). Water depths across this area ranged from a minimum depth of 38.3 m to a maximum depth of 42.6 m. The net pen system will be placed within a subset of that area that contains unconsolidated sediments that are approximately 1 to 3 m (3 to 10 ft) deep. VE Project engineers will ultimately select a specific location within that area based on a diver-assisted assessment of the sea floor when the net pen and mooring system are deployed. The proposed action area is approximately 93,025 m² (22.98 acres) encompassing the net pen and the four (4)-point grid mooring system.

Table 1. Target Area with 3' to 10' of Unconsolidated Sediments

Location	Latitude	Longitude
Upper Left Corner	27° 7.70607′ N	83° 12.27012′ W
Upper Right Corner	27° 7.61022′ N	83° 11.65678′ W
Lower Right Corner	27° 6.77773′ N	83° 11.75379′ W
Lower Left Corner	27° 6.87631′ N	83° 12.42032′ W

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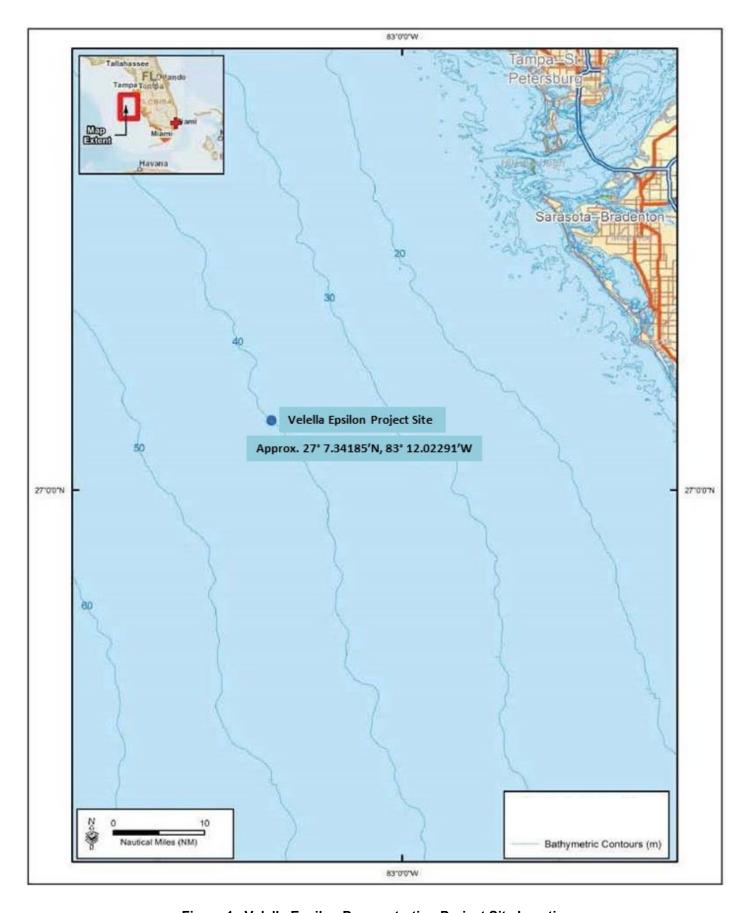


Figure 1. Velella Epsilon Demonstration Project Site Location

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2.0 Prevention Practices

The VE project personnel will ensure that optimal management, monitoring, preparedness, and post storm practices are adhered to for the prevention of facility and stock damage or loss in the event of tropical storms or hurricanes. As such, the VE Project staff is committed to operating and maintaining all facility components in a structurally sound manner in order to prevent or minimize the impact of disasters.

2.1 Installation Maintenance

The VE project personnel will ensure that all equipment is maintained in proper operational condition by:

- Brushing/power washing of the net pen nets will be performed approximately biweekly for the
 first 6 months, then increased cleaning (as needed) to potentially weekly will be performed for
 the last 6 months.
- Performing routine maintenance inspections (i.e., visual, camera, diver-assisted) of the net pen and mooring system to identify and promptly repair any damage to:
 - KikkoNet and bird/fish containment netting
 - Mooring lines, cables, and chains
 - o Embedment anchors
 - o Buoys, lines, markers, and lights
 - o Tender and operational vessel equipment and systems (i.e., generation, refrigeration)
 - Communications equipment and networks
- The VE Project personnel will ensure that all nets, mooring and rigging lines, and anti-predator
 equipment will be stretched tight/taut and maintained in a manner to diminish the likelihood of
 entangling finfish, sea birds, marine mammals, and sea turtles.
- Net Pen Quality Control The strength of the netting material, determined by net mesh size, is essential to contain farmed fish as well as to keep predators from entering the pen.
 - To monitor the strength of the net pens, the width of the netting materials (KikkoNet) including the panels at the waterline, and the upper and bottom panels, will be measured with calipers each month.
 - With the proposed starting mesh width of 2.8mm, a mesh stretch threshold of 1.4 mm has been determined to be a reasonable criteria for the VE Project.
 - When any netting is measured to be 1.4 mm, the contained fish will be removed and the net pen netting will be retired and replaced.
- Regularly conducting maintenance of the net pen and mooring system in order to ensure that it is properly functioning.
 - Repairs to all above items.
 - Special attention will be given to connectors and rope/chain interfaces. Chafe points will be identified inspected, and biofouling removed.

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- Operators will inspect and adjust mooring systems prior to and immediately following a tropical storm or hurricane.
- Operators will; however, consider the relative health and safety risks and benefits associated with the inspection methods utilized.
- Shackles used in mooring systems will be either safety shackled, wire-tied, or welded to prevent pin drop-out.
- VE Project staff will conform with and maintain the net pen and mooring system equipment in accordance with all applicable manufacturer requirements and recommendations.
- The maintenance schedule and reporting for all facility components are captured in Appendix D and Appendix E, of the BMP Plan for the Velella Epsilon Demonstration Project Pioneering Offshore Aquaculture in the Southeastern Gulf of Mexico (Ocean-Era, 2020a).
- The captain will ensure that all vessels have an implemented SOP.
- VE Project staff will conduct timed submersible net pen procedures (including in less-than-ideal weather conditions) to asset the time, staff, and equipment necessary for properly and safely sink the net pen cage.
- VE Project staff will additionally conduct land base facility operations to organize and secure
 equipment, cage materials, feed, processing, and support vessels to reduce loss or damage
 resulting from flooding and wind.
- Chemical wastes and spilled chemicals shall be properly stored and removed from the facility and disposed of at an approved facility.
- VE Project staff have developed a list of appropriate agencies to contact in the event of a
 disaster response that includes, but is not limited to, the EPA, U.S. Army Corps of Engineers, and
 National Marine Fisheries Service.

Kip Tyler
U.S. Environmental Protection Agency, Region 4
Permitting and Grants Branch Chief; Water Division
61 Forsyth Street SW | Atlanta GA 30303-8960
(404) 562-9610
R4NPDESPermits@epa.gov

John Fellows
Acting Section Chief
U.S. Army Corps of Engineers,
SAJ-RD-W, Tampa Permits Section
Office: 813-769-7070

Cell/Telework: 813-538-3932 john.p.fellows@usace.army.mil

Andrew Richard
Regional Aquaculture Coordinator,
NOAA Fisheries Southeast Region; U.S. Department of Commerce
Office: (727) 551-5709; Cell: (727-212-1350)
andrew.richard@noaa.gov

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2.2 Potential Risks

The following potential risks have been identified for each of the following types of disasters; vessel strikes, extreme weather events, tropical storms, and hurricanes. Potential risks associated with entanglement of mammals (and other sensitive marine species) are captured in the *Marine Mammal, Sea Turtle, and Seabird Monitoring and Data Collection Plan for the Velella Epsilon Demonstration Project – Pioneering Offshore Aquaculture in the Southeastern Gulf of Mexico* (Ocean Era, 2020b).

2.2.1 Vessel Strikes

Unintentional vessel strikes to the net pen and mooring system from commercial fishing, recreational, or cargo sea faring traffic potentially may occur due to negligence, loss of navigational aids, undetectable farm location, congested navigation traffic, or derelict vessel collision. Potential risks are:

- Net pen and mooring system damage
- Tender and support vessels damage
- Equipment damage or loss
- Fish escapes
- Human injury

Unintentional vessel strikes to the net pen and mooring system are nearly unavoidable. VE Project staff and the Captain will monitor all available communication channels and frequencies to include, but limited to the following:

- Rescue 21 Distress System Coverage
- HF Distress Frequencies
- MF & HF Channels & Frequencies
- U.S. VHF Channels & Frequencies
- Intl VHF Channels and Frequencies

2.2.2 Extreme Weather Events, Tropical Storms, and Hurricanes

Potential risks associated with extreme weather events, tropical storms, and hurricanes include the following:

- Net pen and mooring system damage
- Tender and support vessels damage
- Equipment damage or loss
- Fish escapes
- Human injury

2.3 Implemented Procedures

The following procedures have been identified to prevent, control, and/or minimize the impacts to the facility potentially caused by disasters; including extreme weather events, tropical storms, and hurricanes. VE Project staff and the Captain will take the following actions to avoid any potential risks associated with extreme weather events, tropical storms, and hurricanes:

Monitor all current weather dispatches and tropical disturbance warnings and events.

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- nowCOAST® is a GIS-based online web mapping service that provides frequently updated weather and ocean observations, coastal and marine weather warnings and forecasts, and potential storm surge flooding maps.
- Storm QuickLook is a product that provides a synopsis of near real-time oceanographic and meteorological observations at locations affected by a tropical cyclone.
- PORTS® is a Physical Oceanographic Real Time System: A NOS service to deliver realtime oceanographic and meteorological data designed primarily for mariners, but with applications for coastal management and emergency operations.
- IOOS® is an Integrated Ocean Observing System: A network of regional ocean observing systems designed to track, predict, manage and adapt to changes in the ocean, coastal and Great Lakes environment.
- At the Captain's decision, notification of any intentions for site evacuation will be made to:
 - At sea VE Project staff and management
 - o USCG
 - Shore base VE Project staff and management
 - o Appropriate regulatory authorities, once all safety precautions have been completed
- Time and safety permitting, administer an additional and appropriate feed rationing to the stock
- Stow all on deck equipment, supplies, feed, and containers as typically performed in preparation for an open ocean voyage return to the VE shore base facilities.
- Traditional industry measures will be taken for storing, transferring, handling, using, and disposing of chemicals.
- VE Project staff will inspect the net pen and mooring system in order to ensure that it is properly functioning and secure.
 - Special attention will be given to connectors and rope/chain interfaces.
 - Operators will inspect and adjust mooring systems; however, consideration will be given considering the relative health and safety risks and benefits associated with the inspection at this time
 - Shackles used in mooring systems will be either safety shackled, wire-tied, or welded to prevent pin drop-out.
- The VE Project staff will ensure that all nets, mooring and rigging lines, and anti-predator
 equipment will be stretched tight/taut and maintained in a manner to diminish the likelihood of
 entangling finfish, sea birds, marine mammals, and sea turtles.
- The VE Project staff will implement the submersible staging procedures of the net pen and mooring system:
 - Firmly securing all net pen service accesses and the jump/predator (bird) netting
 - Opening the buoyance valves and bleeding the air from the floatation rings and ballasts
 - Monitor a controlled lowering of the net pen visually and via camera monitors (as available)
 - Confirm the new positioning and secured mooring of the net pen several meters above the sea floor

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Confirm the security and operational lighting of the farm site's navigational buoys

2.4 Containment Equipment

The following describes the appropriate materials, supplies, and equipment necessary for the containment of stock at the facility. Each of the materials has been engineered and designed with specifications for supporting the integrity of the net pen and mooring system during a 10-year average Category 5 Hurricane.

A single PolarCirkel-style net pen and mooring system would be deployed short-term (1-2 years) using:

- Offshore-strength submersible system,
- ~25.5 m diameter x ~3.13 m depth (deep),
- Effective volume ~ 1,600 m3

On a four (4)-point standard grid mooring system; using embedment-type anchor mooring; and serviced by a tender vessel/feed barge tethered to side of net pen system

Structural Integrity Highlights:

- Withstand 200-Year Storm Submerged 40 Feet Below Surface
- Retains the net pen's position, regardless of the prevailing current and/or wind direction
- A) Mooring System:
 - Eight (8) 3500 lb. embedment (Delta Flipper Style) anchors
 - Four (4) concrete nodes
- B) Node Details:
 - Unique, three-chambered buoyancy system
 - Spherical steel Buoy 1.5 MT net buoyancy
 - HDG grid plate 16-hole
 - Ballast a block concrete and rebar 1750 kg wet weight
 - o Estimated size = 1.7 m x 1.7 m x 0.6 m
 - Quantity = 4
 - Includes 2 to 4 m of chain
- C) All Ropes/Lines:
 - 52 mm, 12-strand polyester rope
 - Gridlines: 60 m | 4 total
 - Anchor Lines: 60 to 90 m | 8 total
 - Node Lines: 25 m | 4 total
 - Bridle Lines: 45 m | 8 total
- D) Net Pen Frame Structure:
 - High-density polyethylene (HDPE)
 - Float collar: HDPE
 - Float collar brackets: HDPE, foam-filled
 - Top net support float: HDPE pipe
 - Optional decking: HDPE
 - All steel components are hot-dipped galvanized

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- Sinker tube: HDPEBallast weight: chain
- E) Net Pen Mesh (KikkoNet):
 - ~25.5 m diameter x ~3.13 m depth
 - Top connected to top net ring (railing)
 - Bottom connected to bottom net ring
 - o 2.8 mm diameter
 - o 40 mm x 40 mm mesh hexagonal
 - Effective volume of 1,600m3

2.5 Reporting System

The reporting system proposed for use to alert responsible facility management and appropriate regulatory authorities during disasters will include a variety of methods based on connectivity with those systems while operating 45 nm offshore. These systems will include, but not be limited to:

- Satellite Phone
- Email
- Cell Phone
- Rescue 21 Distress System Coverage
- HF Distress Frequencies
- MF & HF Channels & Frequencies
- U.S. VHF Channels & Frequencies
- Intl VHF Channels and Frequencies

2.6 Emergency Contact List

Kip Tyler
U.S. Environmental Protection Agency, Region 4
Permitting and Grants Branch Chief; Water Division
61 Forsyth Street SW | Atlanta GA 30303-8960
(404) 562-961

John Fellows
Acting Section Chief
U.S. Army Corps of Engineers,
SAJ-RD-W, Tampa Permits Section
Office: 813-769-7070

R4NPDESPermits@epa.gov

Cell/Telework: 813-538-3932 john.p.fellows@usace.army.mil

Andrew Richard
Regional Aquaculture Coordinator,
NOAA Fisheries Southeast Region; U.S. Department of Commerce
Office: (727) 551-5709; Cell: (727-212-1350)
andrew.richard@noaa.gov

November 1, 2024 Page 9 of 16

CWO3 Anthony R. Sciullo
Sector St. Petersburg, ATON Officer- Prevention/Waterways
410-251-7441 cell
727-502-1522 (St. Pete office)
813-228-2191 ext. 8184 (Tampa/Davis Island)
Anthony.R.Sciullo@uscg.mil

2.7 Fish Transfer

The following procedures will be implemented to contain and transfer commercial fish in a manner which shall prevent the entry of commercial aquatic life into waters of the United States. Two points of transfer of fish will be employed during the 12-month VE Project operation; fingerling stocking and fish harvest. Further details of prevention of escapes may be found in Section 5.2 Escape Prevention of the Best Management Practices (BMP) Plan for the Velella Epsilon Project – Pioneering Offshore Aquaculture in the Southeastern Gulf of Mexico.

2.7.1 Fingerling Stocking

The following activity elements are associated with the initial stocking of fingerlings in the offshore net pen. To ensure the greatest sea faring safety of staff and fingerlings, the day of transfer will be scheduled only on a day of extremely favorable weather conditions.

- Truck hauling of fingerlings in 1M³ carboys from the hatchery to the dockside
- Forklift transfer of the 1M³ carboys from the truck to the transfer vessel
- Navigational transit of the transfer vessel from dockside to the VE offshore farm site
- Fish pump transfer of the fingerlings from the 1M³ carboys into the nursery net

2.7.2 Fish Harvest

The following activity elements are associated with the final harvest of adult fish from the offshore net pen into the harvest transfer vessel hold. To ensure the greatest sea faring safety of staff and harvest, the day of transfer will be scheduled only on days of favorable weather conditions.

- The harvest transfer vessel is moored securely adjacent to the net pen
- Inside the net pen, a large seine net will be deployed by several staff to concentrate fish into close quarters for grading and net selection
- Netted fish will be placed into a closed transfer bag attached to a powered lift davit crane
- The davit crane transfers the transfer bag to the hold in the transfer vessel
- Harvested fish are bled ungutted/head on and iced into 1M3 carboys
- Navigational transit of the transfer vessel from the VE Project offshore farm site to dockside
- Davit crane transfer of the 1M3 carboys from the transfer vessel to the processing truck
- Truck hauling of 1M3 carboys of harvested fish from dockside to processing plant

2.8 Emergency Procedures

Structural failure (emergency procedures) were addressed in Section 2.1.3 Containment Equipment, where the net pen materials have been engineered with design specifications for supporting the integrity of the net pen and mooring system during a 10-year average Category 5 Hurricane. The following emergency procedures will be implemented to minimize fish escapes.

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The Velella Epsilon Demonstration Project – Facility Damage Prevention and Control Plan

- VE Project staff will inspect the net pen and mooring system in order to ensure that it is properly functioning and secure.
 - o Special attention will be given to connectors and rope/chain interfaces.
 - Operators will inspect and adjust mooring systems; however, consideration will be given considering the relative health and safety risks and benefits associated with the inspection at this time
 - Shackles used in mooring systems will be either safety shackled, wire-tied, or welded to prevent pin drop-out.
 - Firmly securing all net pen service accesses and the jump/predator (bird) netting
 - Maintaining the proper working condition of the buoyance valves and floatation rings and ballasts
- During fish transfer, additional staff will monitor the operations and assess the process for any weaknesses that may result in escapees.
 - Should an inadvertent escape occur, the additional staff will attempt to catch the fish and return it to the net pen. Industry observations have documented that escaped cultured fish have the tendency to remain in proximity to the structure in which they have been raised (recognizing it as their food source), thus making recapture an uncomplicated procedure.
 - If escapees are not recaptured, the fish are F1 progeny resulting from indigenous male and female stock originally captured in this same area of the Gulf, thus resulting in no genetic dilution or contamination.

2.9 FDPC Plan Review & Endorsement

We, the VE Project management, Deep Sea Traveler Captain, and the individuals responsible for implementing the FDPC Plan, certify that we have reviewed and have an operational familiarity with the prevention practices of the FDPC Plan.

Velella Epsilon Demonstration Project	FL0A00001		
(Facility Name)	(NPDES #)		
	Danis Juy Peters		
Dennis Jay Peters			
(Facility Manager – Printed Name)			
(Other Individual – Printed Name & Title)	(Other Individual – Signature)		
(Other Individual – Printed Name & Title)	(Other Individual – Signature)		
(Other Individual – Printed Name & Title)	(Other Individual – Signature)		

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3.0 Disaster Response

In the event of a disaster, the VE Project team will undertake the following disaster response efforts to limit and prevent environmental impacts and the release of commercial aquatic life into the waters of the United States.

3.1 Notification Procedures:

The VE Project staff will implement the following procedures for notification of the appropriate agencies as soon as possible and within 24 hours of any disaster impacting the facility. The reporting system proposed for use to alert responsible facility management and appropriate regulatory authorities during disasters will include a variety of methods based on connectivity with those systems:

- Satellite Phone
- Email
- Cell Phone
- Rescue 21 Distress System Coverage
- HF Distress Frequencies
- MF & HF Channels & Frequencies
- U.S. VHF Channels & Frequencies
- Intl VHF Channels and Frequencies

3.1.1 Emergency Contact List

Kip Tyler
U.S. Environmental Protection Agency, Region 4
Permitting and Grants Branch Chief; Water Division
61 Forsyth Street SW | Atlanta GA 30303-8960
(404) 562-961
R4NPDESPermits@epa.gov

John Fellows
Acting Section Chief
U.S. Army Corps of Engineers,
SAJ-RD-W, Tampa Permits Section
Office: 813-769-7070
Cell/Telework: 813-538-3932

Cell/Telework: 813-538-3932 john.p.fellows@usace.army.mil

Andrew Richard
Regional Aquaculture Coordinator,
NOAA Fisheries Southeast Region; U.S. Department of Commerce
Office: (727) 551-5709; Cell: (727-212-1350)
andrew.richard@noaa.gov

CWO3 Anthony R. Sciullo
Sector St. Petersburg, ATON Officer- Prevention/Waterways
410-251-7441 cell
727-502-1522 (St. Pete office)
813-228-2191 ext. 8184 (Tampa/Davis Island)
Anthony.R.Sciullo@uscg.mil

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3.2 Emergency Procedures Reporting

The Velella Epsilon Project team will provide a report (Appendix A) of any emergency procedures used during a disaster and submitted in a reasonable timeframe (contingent upon the duration of **Section 3.3 Response and Cleanup Efforts**) post disaster. The report shall include the cause of the disaster, fish escape information, facility and/or fish recovery efforts, and the effectiveness of any emergency efforts deployed.

3.3 Response and Cleanup Efforts

The VE team will implement the following procedures for commencing a response, recovery, and cleanup efforts. The team is committed to completing such efforts as soon as safely possible and such actions will take precedence over normal work activities. The VE team understands that if any farm site equipment, supplies, or net per array components break loose from the farm site, that marine debris is a threat to our environment, navigation safety, the economy, and potentially human safety and health.

- Post storm/disaster, and as soon as it is safe to navigate or fly over the VE Project farm site, management will dispatch a reconnaissance team to explore and assess any potential facility damage that may have occurred.
- If the submersible net pen and mooring system is found in sound, functional order, the reconnaissance team will notify management to have normal operations resumed.
- GPS transponders aboard the net pen and mooring system would provide regular automated reporting of the array's position. If staff detect that the net pen is outside of the expected operating area, they will use GPS information to launch an emergency response in a timely manner.
- If the submersible net pen and mooring system is found in a damaged or loss state, the reconnaissance team will notify management to implement the reporting procedures identified in Section 3.1.
- Management will also communicate with USACE and NOAA spatial SMEs to ascertain if the location of any facility components has been observed and/or identified to be associated with the VE Project.
- A navigational reconnaissance and recovery team will be dispatched to the observation sites to recover the farm site components and associated debris.
- All recovered farm site components and associated debris will be properly disposed of onshore, repaired, or reassembled on the net pen and mooring system.
- If the submersible net pen is found still attached to the mooring, but damaged, the reconnaissance team will notify management to commence repair operations.
- Should inadvertent escapes occur, staff will attempt to catch the fish and return them to the net pen (if intact) or harvest the fish (procedures above) and transport them to shore base facilities for processing.
 - Industry observations have documented that escaped cultured fish have the tendency to remain in proximity to the structure in which they have been raised (recognizing it as their food source), thus making recapture an uncomplicated procedure.
 - If escapees are not recaptured, the fish are F1 progeny resulting from indigenous male and female stock originally captured in this same area off Madeira Beach, Florida, thus resulting in no genetic dilution or contamination.

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3.4 Procedures for Debris and Fish Carcass Disposal

- All recovered debris (feed bags, packaging materials, waste rope, buoy and mooring line, worn structural components, and netting) will be collected and properly stored on the tender vessel, and returned to shore and properly disposed of.
- Recycling of any material or equipment components will be strongly considered.
- Discharge associated with transport or harvesting of aquatic animals (including blood, viscera, carcasses, or transport water containing blood) will be minimized through proper containment and disposal at an appropriate shore-based facility.
 - Any such material and liquids will be properly stored in plastic bags within sealed containers on the tender vessel until the next opportunity for transport back to shore.
 - Carcasses from mortalities will be routinely (when observed) removed from the net pen system will be either refrigerated or frozen in plastic bags within sealed containers on the tender vessel until the next opportunity for transport back to shore (Appendix H).
 - Mortalities will be disposed of, and notification given in, accordance with Disposal of Dead Animals BMPs.

3.5 FDPC Plan Review & Endorsement

We, the VE Project management, Machias Captain, and the individuals responsible for implementing the FDPC Plan, certify that we have reviewed and have an operational familiarity with the disaster response requirements of the FDPC Plan.

Velella Epsilon Demonstration Project	FL0A00001			
(Facility Name)	(NPDES #)			
	Danis Jay Peters			
Dennis Jay Peters				
(Facility Manager – Printed Name)				
(Other Individual – Printed Name & Title)	(Other Individual – Signature)			
(Other Individual – Printed Name & Title)	(Other Individual – Signature)			
(Other Individual – Printed Name & Title)	(Other Individual – Signature)			

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APPENDIX A EMERGENCY PROCEDURES USED DURING A DISASTER

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WRITTEN REPORT FOR EMERGENCY PROCEDURES USED DURING A DISASTER

Velella Epsilon Demonstration Project	NPDES Permit Number: <u>FL0A00001</u>		
Name of Person Submitting this form:			
DATE THIS WRITTEN REPORT WAS SUBMITTED TO THE	PERMITTING AUTHORITY:		

Cause of the Disaster / Failure or Damage	Date Disaster / Failure or Damage Occurred	Time Elapsed Until the Failure or Damage was Repaired	Materials Released or Fish Escapes to the Environment from the Failure or Damage (Estimate)	Fish Escape Recovery Efforts	Effectiveness of any Emergency Efforts Deployed

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