

Shellfish Harvesting & Processing Requirements For Aquacultured Product



Shellfish Harvester Education Training Program



- No Aquaculture Certificate of Registration will be issued without proof of annual training.
- Resets April 1st each year
- Links on web pages:
<https://www.fdacs.gov/Divisions-Offices/Aquaculture>
&
<http://myfwc.com/Shellfish>.



Certified Processors

All Shellfish Must be Delivered Directly to a Certified Processor

Rule 5L-1, F.A.C.

Aquacultured shellfish may NOT be sold
directly to
Restaurants or Retail Markets





Vibrio spp. Illness

- *Vibrio spp.* are **naturally abundant** in warm Gulf of Mexico waters.
- **Open wound** (*most common*).
- **Consumption** of raw shellfish.

Symptoms include:

- ✓ Fever
- ✓ Diarrhea
- ✓ Nausea
- ✓ Vomiting
- ✓ Change in mental status
- ✓ Septic shock
- ✓ Hypotension (low blood pressure)
- ✓ Distinctive bulbous skin lesions
- ✓ Amputation
- ✓ **Death in @ 50% of cases**



Vibrio Control Management (VCM)

Strict time-temperature guidelines calculated to minimize high temperature exposure



- Aquaculturists must adhere to time-temperature guidelines in Vibrio Control Management Plan (VCM)
- Oysters must be in the cooler of Certified Processor by:
 - 11:00 am during summer **VCM** months
 - 1:00 pm during **VCM** months of April & October
 - 5:00 pm during **non-VCM** months November to March

Oysters					Clams
(Times are when oysters must be placed in cooler at a certified shellfish processing facility)					
Month	Traditional Cooling ¹ (≤55°F in 8 hours)	Rapid Cooling ² (≤55°F in 2 hours)	On-board Cooling ³ (≤55°F at time of delivery)	Restricted Use Only ⁴ (Green Tag)	Delivery from time of harvest
November	10:00 p.m.	Non-Vibrio Control Month	Non-Vibrio Control Month	Non-Vibrio Control Month	10:00 p.m.
December	10:00 p.m.	Non-Vibrio Control Month	Non-Vibrio Control Month	Non-Vibrio Control Month	10:00 p.m.
January	10:00 p.m.	Non-Vibrio Control Month	Non-Vibrio Control Month	Non-Vibrio Control Month	10:00 p.m.
February	10:00 p.m.	Non-Vibrio Control Month	Non-Vibrio Control Month	Non-Vibrio Control Month	10:00 p.m.
March	10:00 p.m.	Non-Vibrio Control Month	Non-Vibrio Control Month	Non-Vibrio Control Month	10:00 p.m.
April	4:00 p.m.	4:00 p.m.	3:00 p.m.	4:00 p.m.	12 Hours
May	11:00 a.m.	2:00 p.m.	3:00 p.m.	4:00 p.m.	12 Hours
June	Not permitted	11:00 a.m.	3:00 p.m.	4:00 p.m.	10 Hours
July	Not permitted	11:00 a.m.	3:00 p.m.	4:00 p.m.	10 Hours
August	Not permitted	11:00 a.m.	3:00 p.m.	4:00 p.m.	10 Hours
September	Not permitted	11:00 a.m.	3:00 p.m.	4:00 p.m.	10 Hours
October	1:00 p.m.	3:00 p.m.	3:00 p.m.	4:00 p.m.	12 Hours

Refer to FWC regulations for current bag limits and resource protection seasonal closures.

1 - **Traditional Cooling** - Oysters must be in the cooler of a certified facility by time specified the day of harvest and at or below 55°F in 8 hours.

2 - **Rapid Cooling** - Oysters must be in the cooler of a certified facility by time specified the day of harvest and at or below 55°F in 2 hours.

3 - **On-board Cooling** - Oysters cooled on boat and stored under mechanical refrigeration or in a cooler surrounded by ice. Oysters must be in the cooler of a certified facility no later than 3:00pm.

4 - **Restricted Use (green tag)** - Shellfish that do not meet the Rapid Cool or On-Board Cooling requirements must be tagged for slacking only by a certified dealer or for Post Harvest Processing (PHP) only.



Vibrio Control Management (VCM)

Shellfish Tagging:

- A critical part of Florida's Vibrio Control Management Plan is product labeling.
- Ensures product has been properly harvested and handled.
- Establishes a chain of custody.
- Allows product trace backs if illnesses occurs.





Aquaculture Shellfish Tags

Know your AQ Numbers!



There are 3 important numbers associated with an Aquaculture Lease

- Aquaculture Certificate Number -(begins with “AQ”) **AQ1234567**
- Aquaculture Lease Number - (“AQ” is in the middle) **12-AQ-1234**
- Parcel Number - (begins with letter) **W1234**



Aquaculture Tags :

➤ Complete Tag Information:

- Harvester AQ #
- Harvest date & harvest area
- Specific Lease or Parcel #
- Species
- Quantity
- Product Consigned To (bulk tag)

****Note - No SPL Numbers**



AQ HARVESTER TAG

HARVESTER AQ # **AQ1234567**

DATE OF HARVEST _____ TIME OF HARVEST _____

TIME OF REFRIGERATION (if applicable) _____

LEGAL HARVEST AREA # _____ (4 digit code)

SPECIFIC LEASE OR PARCEL # **12-AQ-1234** or **W1234**

TYPE OF SHELLFISH _____ QUANTITY OF SHELLFISH _____

Cooling option (circle one): Traditional Rapid Cool On-Board Cool

THIS TAG IS REQUIRED TO BE ATTACHED UNTIL CONTAINER IS EMPTY
OR IS RETAGGED AND THEREAFTER KEPT ON FILE FOR 90 DAYS

BULK AQUACULTURE TAG

HARVESTER AQ # **AQ1234567**

DATE OF HARVEST _____ TIME OF HARVEST _____

TIME OF REFRIGERATION (if applicable) _____ COOLING OPTION: Traditional/ Harvest / Rapid Cool

LEGAL HARVEST AREA # _____ (4 digit code)

SPECIFIC LEASE or Parcel # **12-AQ-1234** or **W1234**

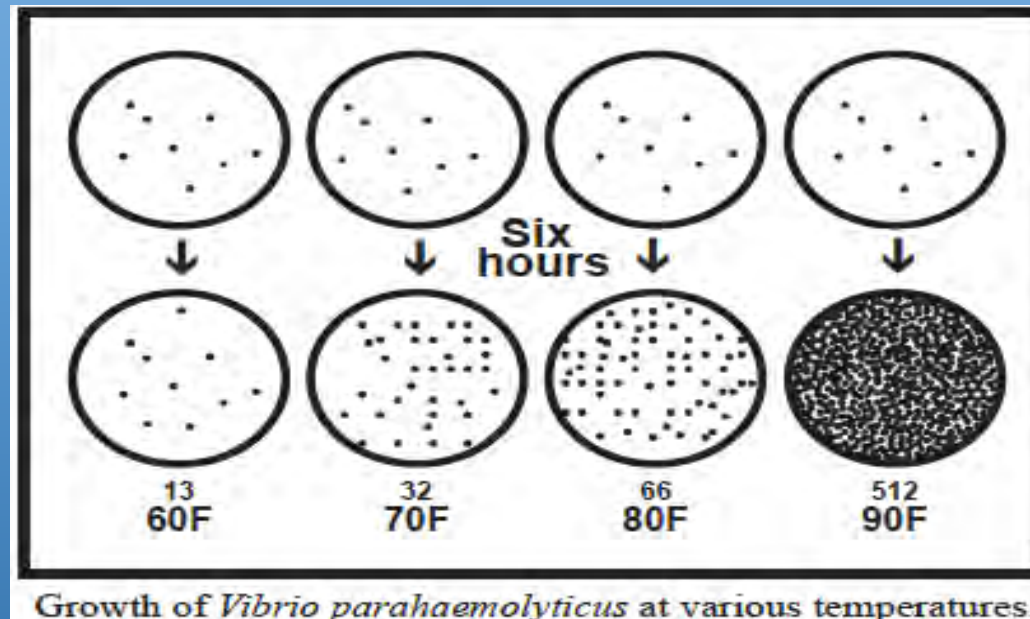
TYPE OF SHELLFISH _____ QUANTITY OF SHELLFISH _____

CONSIGNEE TO: **Certified Processor #**

THIS TAG IS REQUIRED TO BE ATTACHED UNTIL CONTAINER IS EMPTY
OR IS RETAGGED AND THEREAFTER KEPT ON FILE FOR 90 DAYS

Vibrio Growth

- Any temperature abuse of shellfish can cause low numbers of Vibrio present at time of harvest to multiply to infectious levels.



Risks of Exposed Oysters



No more than 4 hours out of the water
or
oysters must be put back down for 14 days



Shellfish Illness Investigations



Illnesses associated with shellfish consumption:

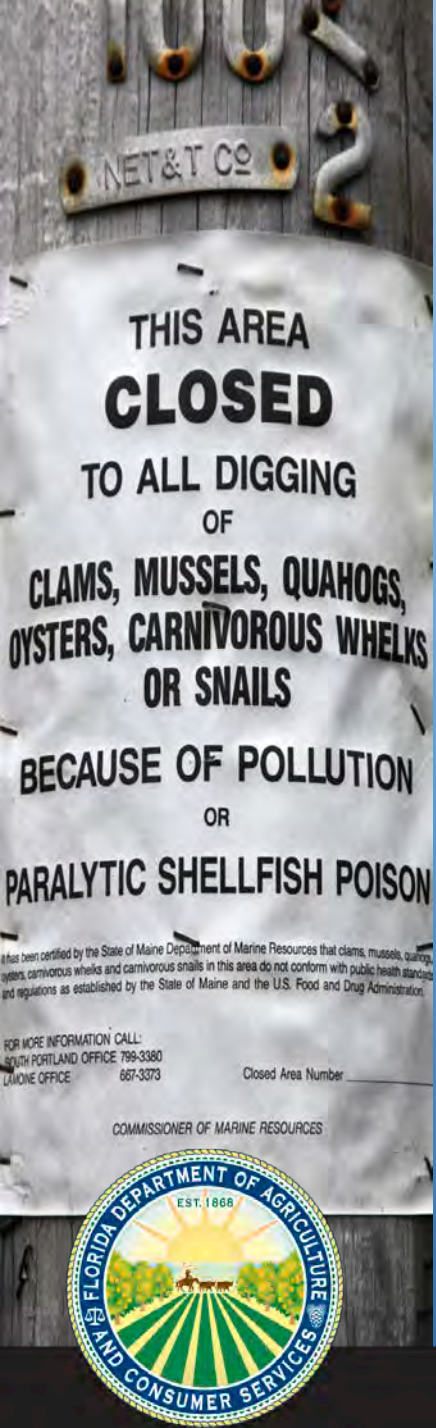
- Information is reported to the **Center for Disease Control (CDC)**
 - Cholera and Other Vibrio Surveillance System (**COVIS**)
- Investigations are coordinated by several agencies.
- Restaurants or seafood markets are investigated
- Harvest tags & Invoices trace the implicated product to:
 - Product source (harvest area and lease number).
 - Harvesters, aquaculturists, and dealers.
- Harvest areas, aquaculturists, and dealers are then further investigated for health or safety issues.



Shellfish Illness Outbreak

“two or more persons not from the same household”

- Outbreaks may result in corrective actions for:
 - Facilities
 - Aquaculturists
 - Harvesters
- Corrective actions may include:
 - Product Recalls
 - Facility Sanctions
 - Facility Closures
 - Harvest Area Closures (*may be permanent*)
- Harvest area closures can be economically devastating



Shellfish Illness Outbreak: (cont.)

Foodborne Illness Outbreak Database

This database provides summaries of significant food and water related outbreaks occurring since 1984 caused by E. coli, Salmonella, Hepatitis A, Campylobacter and other pathogens. [READ MORE »](#)

[Return to Search Results »](#)

Apalachicola Bay, Area 1642, Oysters 2011

Consumption of raw or steamed oysters harvested from Area 1642 in Apalachicola Bay, Florida, was linked to an outbreak of *Vibrio cholerae* O75. The ill resided in four states, but had consumed the oysters while in Florida. Area 1642 is a zone that stretches from north to south in Apalachicola Bay just on the east side of the bridge that goes from Eastpoint, Florida, to St. George Island, Florida. The zone is approximately two miles wide from east to west. The traceback implicated oysters harvested between March 21 and April 6.

Tags: [cholera](#)



Norovirus



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State oyster recall underway on Pacific Northwest coast over Norovirus

BY NEWS DESK | APRIL 14, 2017

Due to multiple reports of oyster-associated Norovirus-like illnesses, Washington State is conducting a recall for all shellfish harvested from 3/15/17 to 4/11/17 from the implicated portion of the Hammersley Inlet growing area. The area of the recall has been closed.

At this time the following companies are identified in this recall include: Calm Cove Shellfish Company, Clearwater Shellfish, Gomez Shellfish, Goodro Shellfish, National Fish and Oyster Company, Navy Yard Oyster Company, Padden Seafood, Rivera's Shellfish, Russ Shellfish, S and B Shellfish Company, Salazar Shellfish, Schreiber Shellfish, and Sea Fresh Farms.



State officials believe that the implicated shellfish companies are in the process of contacting their customers. The state will provide additional information and details of distribution as it becomes available. Local health jurisdictions are aware of the recall, but are not being asked to participate in formal recall verification activities at this time.

Following reports of norovirus-like illnesses in people who report eating raw oysters from several areas in Washington and elsewhere, public health officials at the Washington

State Department of Health have tracked down areas where some of the illness-linked oysters were harvested.

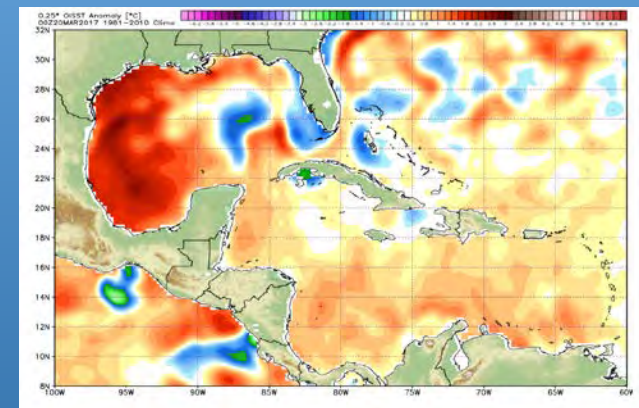
Over the past several weeks, small harvest closures and recalls have been ordered, the largest of which is in Hammersley Inlet in Mason County, where a recall has been issued for any shellfish harvested there since March

“Other” *Vibrio* sp. Illnesses



2017 Distribution of *Grimontia Hollisae* shellfish related illness cases

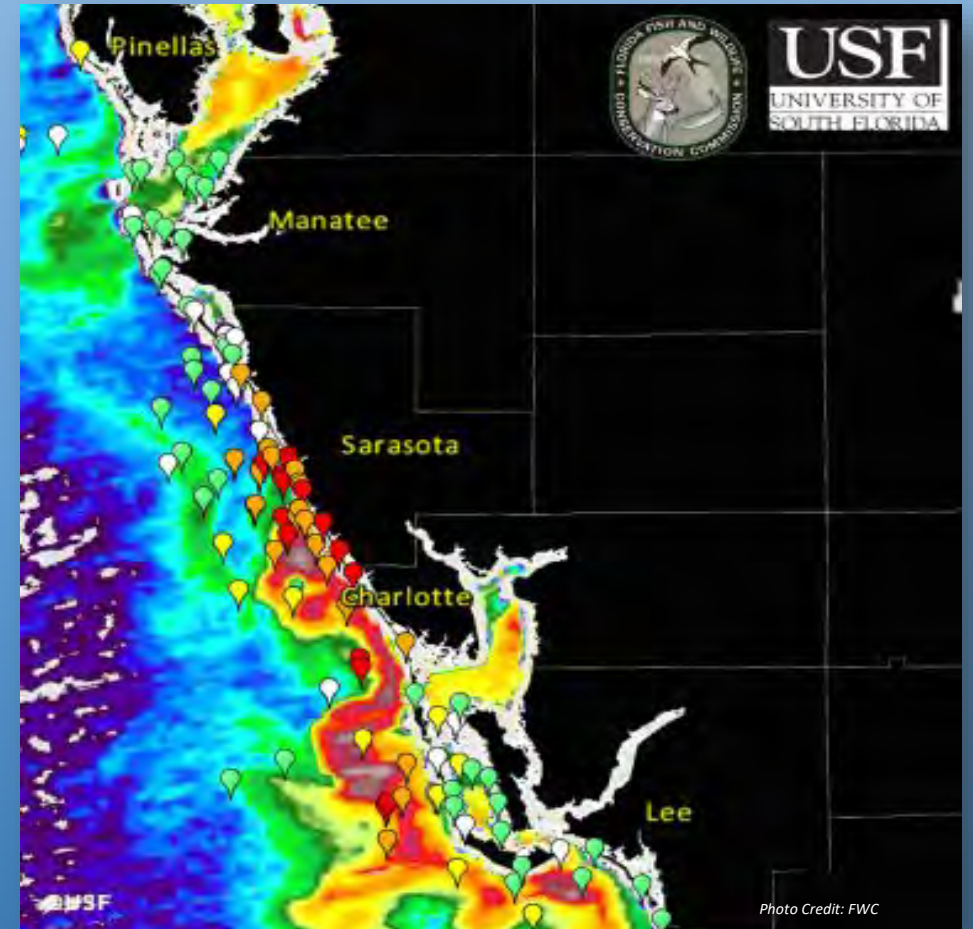
- In 2017 the Gulf average sea surface temperature never fell below 73 degrees over the winter for the first time on record
- Water temperatures at the surface of the Gulf of Mexico have spurred historically warm winters from Houston to Miami.



Rising Trends - HABs

Water temperatures at the surface of the Gulf of Mexico have stayed warm and not decreasing as in previous years.

- Increases in extent and duration of red tide.
- New harmful algae species.
 - *Pseudo-nitzschia* spp.
 - *Pyrodinium bahamense*





Harvest Vessel Condition

Must meet the Rule 5L-1 requirements

- Clearly displayed registration numbers
- Coast Guard approved:
 - Flotation device for each person
 - Marine use fire extinguisher,
 - A sound producing device (i.e. whistle)
 - 3 day time/night time signals
- Portable toilet or other sanitation devise



Transportation:

Must meet the Rule 5L-1 requirements

- **No animals**
-dogs, fish, etc.
- **No trash-**
-cans, food, old tires, car battery, etc.
- **No hazardous chemicals**
-Gas/oil cans, bleach, grease, fertilizer, paint
- **Protected from potential contaminants**
- Don't cover with plastic tarp
- **Ice product if possible**





Summary - Wild vs. Aquaculture

Both wild and Aq shellfish must **adhere to the same harvesting regulations and time/temp requirements**

Both Must deliver to a certified processor

	Wild	Aquacultured
Regulations	5L-1, F.A.C.	5L-1, F.A.C. and FDACS Best Management Practices, 5L-3, F.A.C.
Vessel	Must meet Rule 5L-1, F.A.C.	Must meet Rule 5L-1, F.A.C.
Harvest Time	Vibrio Management Plan	Vibrio Management Plan
Delivery	Directly to certified dealer (no Remote Buying)	Directly to certified dealer (No Remote Buying)
Harvest Season	FWC open/closed seasons	All year
Harvest Size	3 inches	All sizes
Replant/Resubmerge	Not applicable	-14 days if exposed >4 hours during VCM Segregate from other shellfish Maintain replant records.



Safe harvest!



Questions?

Contact the Division:

Tallahassee Office (Main)	(850) 617-7600
Atlantic Coast Office	(321) 984-4890
Apalachicola Office	(850) 653-8317
Panama City Office	(850) 236-2200
Cedar Key Office	(352) 543-5181
Port Charlotte Office	(941) 316-0954

