

# Nursery of Shellfish in Prohibited Waters

## Review of Brad Scott Issue Timeline

Marine Fisheries Commission

May 21, 2015



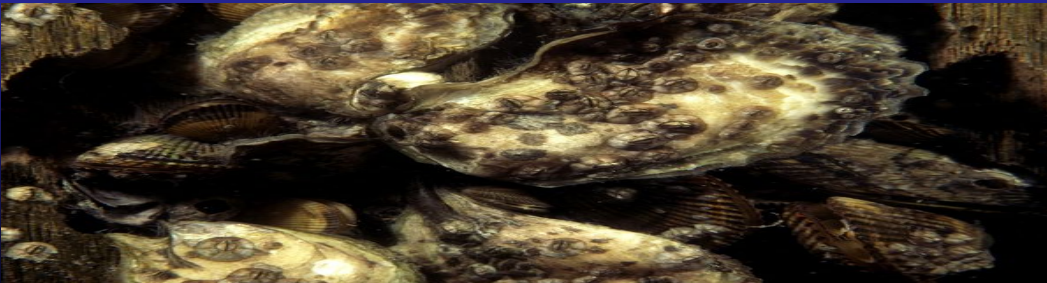
# Public Health Authority of Marine Fisheries Commission

- In July 2011, the Division of Environmental Health was abolished and the Shellfish Sanitation and Recreational Water Quality Section was transferred to the Division of Marine Fisheries.
- As part of the transfer, the Marine Fisheries Commission was given authority to adopt rules establishing sanitation requirements for the harvesting, processing and handling of scallops, shellfish and crustacea.



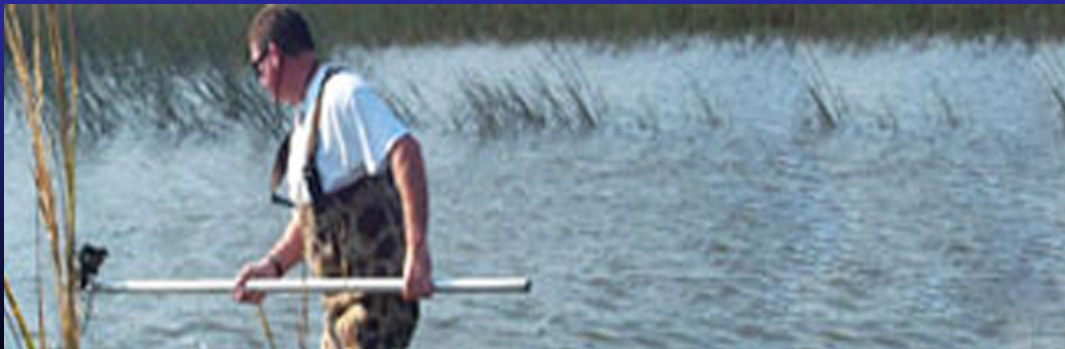
# Public Health Mission

- NC G.S. 130A-1.1
  - Promote the highest level of health possible for the people of North Carolina
  - Identify, reduce and prevent health risks
- Memorandum of Agreement between division and the Department of Health and Human Services' Division of Public Health.



# Shellfish Sanitation Responsibilities

- Provide risk assessments to ensure shellfish are safe for human consumption
- This includes sanitary survey of all shellfish growing waters
- 70 percent of seafood consumption illnesses result from consumption of molluscan shellfish



# National Shellfish Sanitation Program

- Started in 1925 following outbreaks of typhoid fever linked to tainted shellfish
- Sets guidelines through the Interstate Shellfish Sanitation Conference for inclusion in the National Shellfish Sanitation Program Model Ordinance for standardizing how shellfish are produced, stored, transported, processed, sold and served
- The program includes state shellfish authorities, Food and Drug Administration and industry



# Shellfish Harvesting Water Classifications

- Approved
- Conditionally Approved
- Restricted
  - Based on water contaminated with moderately high bacteria levels that can be mitigated through depuration.
- Prohibited
  - Can be contaminated with high bacteria but also includes other contaminants such as pathogenic viruses, chemicals, heavy metals, pesticides and other poisonous or deleterious substances.



# Model Ordinance for Seed Shellstock

Seed may come from any growing area or from any growing area in any classification, provided that:

- A. The source of the seed is sanctioned by the authority.
- B. Seed from growing areas or growing areas in the restricted or prohibited classification have acceptable levels of poisonous or deleterious substances; and
- C. Seed from growing areas or growing areas in the prohibited classification are cultured for a minimum of six months.



# Timeline - 2007

- Mr. Scott applied for an Aquaculture Operation Permit
- Request was not for the Masonboro Marina, but was still for an area using prohibited waters
- Denied by division director because the nursery would be in prohibited waters





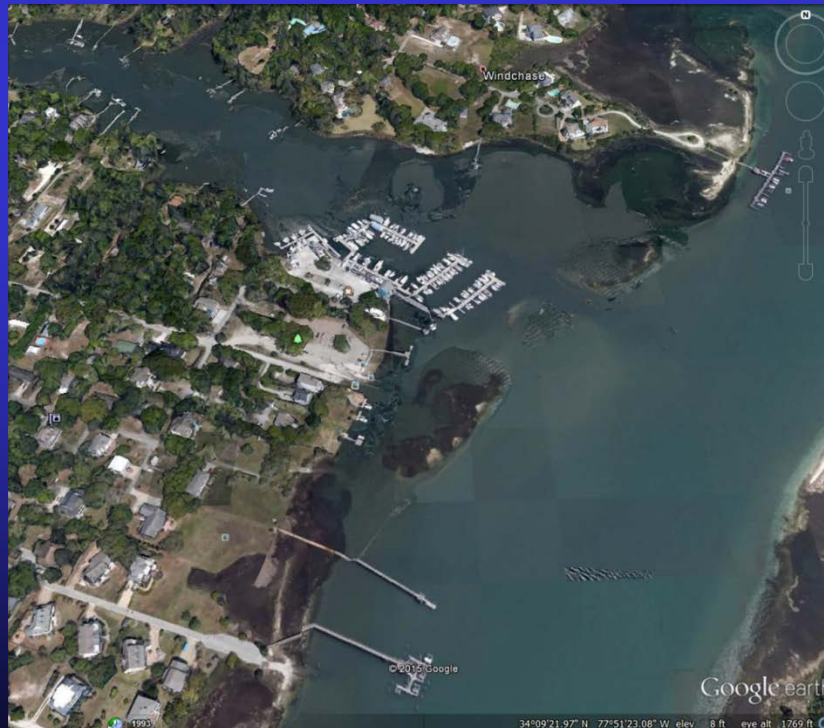
# Timeline - 2008

- Mr. Scott requested declaratory ruling from the commission on proper applicability of rule allowing the director to deny permit based on public health threats
- Commission determined the rule was properly interpreted and permit properly denied due to pollution and potential threat to public health for consuming contaminated shellfish
- Commission passed motion to review leases in prohibited (polluted) waters



# Timeline - 2009

- Mr. Scott inquired about using Masonboro Marina for a seed nursery.
- Masonboro Marina is in a prohibited area.



# Timeline - 2009

The division provided the following guidance:

- Leases cannot be granted in closed areas due to pollution (restricted and prohibited)
- Conduct testing to ensure poisonous or deleterious substances do not exceed safe levels



# Timeline - 2010

“The use of prohibited area water for the taking or raising of seed shellstock is permitted under the National Shellfish Sanitation Program. The exception is seed from waters that cause them to become contaminated with unacceptable levels of poisonous or deleterious substances, such as marine biotoxins, heavy metals or chemical contaminants. Decisions regarding where or how such use will be permitted is strictly up to each individual state. Food and Drug Administration will not intervene in any such decision unless we have reason to believe that area waters are not suited for seed production because of poisonous or deleterious substances.”

U.S. Food and Drug Administration email Feb. 12, 2010



# Timeline - 2011

- Email from the Division of Environmental Health director stating the mission is to ensure shellfish is safe for consumption
- Marinas have potential for elevated levels of contaminants other than bacteria
- Oyster tissue samples were collected and analyzed for potential contaminants.



# Timeline - 2011

- Results from the oyster tissues showed significant elevated levels of arsenic and elevated zinc levels.
- Division of Public Health risk assessment determined:

“Ingestion of oysters harvested in this area may pose an increased human health cancer risk, notably from Arsenic exposure.”



# Timeline - 2011

- In November, the division director provided the commission an update.
- Cited the tissue sample results and intended not to grant permit due to public health concerns.
- The commission agreed by consensus that nursery of shellfish in prohibited water to be transferred to leases in an is an unacceptable practice.



# Timeline - 2012

- Numerous correspondence from Mr. Scott questioning the health risk of arsenic
- Email from Dr. Daniel to Mr. Scott restating guidance previously provided for him to be granted a permit and addressed the lack of conclusive evidence supporting arsenic is not a public health risk





# Timeline - 2012

- Mr. Scott addressed the commission's Shellfish/Crustacean Advisory Committee and the committee asked staff to present information.
- Staff met with Mr. Scott in advance of the advisory committee meeting and made presentations.
- Advisory committee made no formal action, but several members advised Mr. Scott to seek another location.



# Timeline - 2013

- Department of Environment and Natural Resources Ombudsman Joseph Harwood responds to Mr. Scott's issue.
- Stated issue was fully investigated and vetted through the department.
- Advises to find a more suitable location.
- If desires to pursue further, must seek statutory and rule changes.



# Timeline - 2014

- Ombudsman responds again to Mr. Scott on behalf of department Secretary Skavarla
- Seafood marketing can be adversely affected by incidences of health issues associated with shellfish from prohibited waters.
- Current rules are protective and prudent for state's shellfish industry and safety for its citizens.



# Timeline - 2014

- The current draft of the Oyster/Clam Fishery Management Plan will include information clarifying shellfish hatcheries and nurseries are not allowed in prohibited waters
- 2014 legislation on transplanting oysters and clams allows the transplant from restricted, not prohibited, waters to private leases through the Aquaculture Seed Transplant Permit.



# Summary

- Public health must be the first and primary consideration.
- Mr. Scott desires to use prohibited waters containing contaminants that pose a public health risk.
- Since 2007, the division, department and commission have consistently and thoroughly addressed Mr. Scott's issue and denied his request due to public health concerns and advised him to seek another location.



















