

GLOUCESTER SHELLFISH PACKET

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All shellfishing areas are subject to closures from red tide or severe weather events. It is the responsibility of all shellfish harvesters to know the status of shellfish areas before harvesting. **Call (978-281-9741 or (978) 325-5245 for updates. E-mail: pseminara@gloucester-ma.gov**

Office: (978) 325-5758 Cell: (978) 949-1223

Pursuant to Massachusetts General Law Chapter 130, Section 80, all Commercial Shellfish Harvesters must obtain a Commercial Shellfish Permit and transaction card from the Commonwealth of Massachusetts.

Call (617) 626-1520 for details. Email: marine.fish@state.ma.us

Massachusetts Division of Marine Fisheries Designated Shellfish Growing Area Codes for:

Conditionally Approved Shellfish Areas in N-9, N-7, as well as Growing Areas for Sea, Surf, Hen Clams

N-9 – Annisquam River

N9.12 - is primarily on the west side of the Annisquam River between the A. Platt Andrew (Rte. 128) Bridge and the Railroad Bridge. It is open all year and is closed for 3 days after a 1" rain event. This flat is under a management plan and shellfish may only be harvested from this area on Mondays and Thursdays. This includes areas known as:

The Sandbar (Mondays & Thursdays)

Oakes Flat (Mondays & Thursdays)

Trunnel Cove (Mondays & Thursdays)

N9.10 – is **Little River south**. It meets conditionally approved water quality standards from October 15 – May 15 only. During that time frame it is closed for 5 days on a ½" rain event. This flat is under a management plan and shellfish may only be harvested from this area on Tuesdays, Fridays, and Sundays. This includes areas known as:

Upper Little River (10/15 – 5/15, Tuesdays, Fridays, & Sundays)

Part of Piggery Creek - outside the buffer zone line (10/15 – 5/15, Tuesdays, Fridays, & Sundays)

Most of the Presson Flat (10/15 – 5/15, Tuesdays, Fridays, & Sundays)

N9.11 – is **Little River north**. It meets conditionally approved water quality standards from October 15 – May 15 only. During that time frame it is closed for 5 days on a 1" rain event. This flat is under a management plan and shellfish may only be harvested from this area on Tuesdays, Fridays, and Sundays. This includes areas known as:

Nichols (10/15 – 5/15, Tuesdays, Fridays, & Sundays)

Red Pier Creek (10/15 – 5/15, Tuesdays, Fridays, & Sundays)

N9.8 – is **Jones River**. It meets conditionally approved water quality standards from December 1 – April 30 only. During that time frame it is closed for 3 days after a 1" rain event. This flat is under a

management plan and shellfish may only be harvested from this area on Mondays, Wednesdays, and Saturdays – one designated tide per day. In the event of a rainfall closure, this area is open on the next available day, for one designated tide set by the Shellfish Constable. This includes areas known as:

Clamshell Point - RECLASSIFIED AS A PROHIBITED AREA 02/2018

The Straits (12/1 – 4/30, Mondays, Wednesdays, & Saturdays – one designated tide)

Maud Gibbons (12/1 – 4/30, Mondays, Wednesdays, & Saturdays – one designated tide)

Upper Mutton Creek (12/1 – 4/30, Mondays, Wednesdays, & Saturdays – one designated tide)

N9.5 – is on the east side of the Annisquam River. It is open all year and is closed for 3 days after a 1” rain event. This includes areas known as:

Montgomery’s

Frog Rock

N9.7 – is on the west side of the Annisquam River. It is open all year and is closed for 3 days after a 1” rain event. This includes areas known as (from south to north):

Iron Bank

Front of Merchants

Wingersheek Beach non-commercial area – from the #16 nun buoy by Cross Creek to the sandbar opposite the Annisquam Lighthouse

N9.9 – is on the east side of the Annisquam River. It is open all year and is closed for 3 days after a 1” rain event. This includes areas known as:

Plummers (Corliss Landing)

Wheeler Street Boatyard

N9.20 – is on the east side of the Annisquam River. It is open all year and is closed for 3 days after a ½” rain event from June 1 – October 31 and is closed for 3 days after a 1” rain event from November 1 – May 31. This is the area known as:

The end of Wheelers Point

N9.3 – is on the east side of the Annisquam River. It is open all year and is closed for 3 days after a ½” rain event from June 1 – October 31 and is closed for 3 days after a 1” rain event from November 1 – May 31. This is the area known as:

Mill River

N9.19 – is on the east side of the Annisquam River. It is open all year and is closed for 3 days after a ½” rain event from June 1 – September 30 and is closed for 3 days after a 1” rain event from October 1 – May 31. This is the area known as:

Goose Cove

N9.6 – is on the east side of the Annisquam River. It is open all year and is closed for 3 days after a 1” rain event. This includes areas known as:

Lower Flat

Back Creek

N9.16 – is on the east side of the Annisquam River. It meets conditionally approved water quality standards all year and is closed for 3 days after a 1” rain event. This flat is under a management plan and shellfish may only be harvested from this area from October 1 through May 31. This is the area known as:

Cambridge Beach

N9.17 – is on the east side of the Annisquam River. It meets conditionally approved water quality standards all year and is closed for 3 days after a 1” rain vent. This flat is under a management plan and shellfish may only be harvested from this area from October 1 through May 31. This is the area known as:

Lighthouse Beach (Norwood Heights Beach)

N9.23 Jones River Marshes South- is on the west side of the Annisquam River and meets conditionally approved water quality standards from Dec. 1- April 30. During that time it closes for 3 days on a 1” rain event.

Jim Derneys

N9.24 Jones River Marshes North- is on the west side of the Annisquam River and meets conditionally approved water quality standards from Dec. 1- April 30. During that time it closes for 3 days on a 1” rain event.

Lower Mutton Creek

The High Flat

The High Flat-Cove Portion

Cross Creek.

N-7 - Essex Bay

N7.6 – is Outer Essex Bay. It meets conditionally approved water quality standards from June 1 – December 15 and is closed for 5 days after a 6/10” rain event and meets approved (rain exempt) water quality standards from December 16 – May 31. Outer Essex Bay includes areas known as:

The Spit

John’s Cove

Spaulding Creek

N7.0 – is Inner Essex Bay. It meets conditionally approved water quality standards from June 1 – December 15 and is closed for 5 days after a 6/10” rain event and meets conditionally approved water quality standards from December 16 – May 31 and is closed for 5 days after a greater than 1” rain event. Within this area Farm Creek and Two Penny Loaf have designated days for shellfishing. Shellfish may only be harvested from Farm Creek and Two Penny Loaf on Mondays, Wednesdays, and Saturdays. Inner Essex Bay includes areas known as:

Farm Creek (Mondays, Wednesdays, & Saturdays)

Two Penny Loaf (Mondays, Wednesdays, & Saturdays)

Lanes Creek

Walker (Joes) Creek

Growing Area Codes for Sea, Surf, Hen Clams

Non-commercial only – the catch limit is a maximum of one (1) bushel per week

N8 Coffins Beach

N9.7 Wingersheek Beach

N12.0 Good Harbor Beach

All shellfishing areas are subject to closures from red tide or severe weather events. It is the responsibility of all shellfish harvesters to know the status of shellfish areas before harvesting. Call (978) 281-9741 for updates.

CONDITIONAL AREA MANAGEMENT PLAN Annisquam River - Gloucester Harbor
AMENDED February 2019 (Amended sections are in italics)

I. General Description of Conditionally Managed Area

The Annisquam River/Gloucester Harbor complex, shellfish growing area N9, is a 2,425 acre river and embayment system which bisects Cape Ann. The river runs from Ipswich Bay to the north to Gloucester Harbor to the south. Gloucester Harbor is connected at its most northwesterly point to the Annisquam River by the Blynman Canal. The mouth of the harbor faces south and is framed by Mussel Point to the west and Dog Bar Breakwater to the east. The river/harbor complex is entirely in the City of Gloucester. The estuarine system associated with the river drains a watershed limited by the granite ridges which frame the river to the east and west. Therefore, there is a short distance to the growing area for storm water runoff. The harbor watershed is primarily urban with densely populated neighborhoods. The head of the harbor is ringed with fishing related industries. The river is more sparsely populated with a much lower percentage of impervious surface. Populations along the river portion of the complex increase significantly in the summer months. All conditionally approved areas in the N9 growing area are located in the Annisquam River. All shellfish growing areas in Gloucester Harbor are currently prohibited and therefore closed to shellfishing.

The Massachusetts Division of Marine Fisheries (MDMF) has determined that portions of shellfish growing area N9 in the Annisquam River and Gloucester Harbor in the City of Gloucester, Massachusetts meet the National Shellfish Sanitation Program (NSSP) criteria for a conditionally approved classification based upon established rainfall amounts and/or season.

The Division of Marine Fisheries and the City of Gloucester concur that the below defined shellfish areas N9.3, N9.5, N9.6, N9.7, N9.8, N9.9, N9.10, N9.11, N9.12, N9.16, N9.17, N9.19, and N9.20 in the City of Gloucester classified as "CONDITIONALLY APPROVED" shall be opened to shellfish harvesting and managed under the conditions stipulated herein by the governmental agencies involved.

The "CONDITIONALLY APPROVED" areas are described as follows:

N9.3(formerly N9.5M) Mill River

Rain action level/closure: > 0.50"/3 days

"The waters and flats of the Mill River in the City of Gloucester north of the Washington Street Bridge and south of a line drawn from the 1st stone and wood pier at #6 Riverside east to #50 Vine Street."

N9.5 Montgomery's

Rain action level/closure: > 1.00"/3 days

“The waters and flats of the eastern shore of the Annisquam River in the City of Gloucester from the Route 128 highway bridge north to Sunset Point.”

N9.6 (formerly N9.5L/N9.5B/N9.5C) Lower Flat/Back Creek

Rain action level/closure: > 1.00"/3 days

“The waters and flats of the Gloucester shoreline known as Back Creek and Lower Flat, north of a line drawn from the house at #50 Vine Street west to the 1st stone and wood pier at #6 Riverside and south of the southernmost bridge abutment of the Washington Street Bridge at the mouth of Goose Cove, excluding N9.20 Wheeler’s Point.”

N9.7(formerly N9.4) Rust Island to Farm Point

Rain action level/closure: > 1.00"/3 days

“The waters and flats of the western shore of the Annisquam River in the City of Gloucester from the Route 128 highway bridge north to Farm Point, including those flats east of a flagged marker at the southeastern end of 232 Atlantic Street south and west to the eastern most point of Pearce Island, and then from the flagged marker on an upland point on Pearce Island south and west to the northeast corner of 62 Crafts Road.”

N9.9(formerly N9.5P/N9.5W/N9.5WC) Plummer’s Cove/Wheeler’s Cove

Rain action level/closure: > 1.00"/3 days

“The waters and flats of the eastern shore of the Annisquam River from the northern point of Sunset Hill northerly to the southern lot line at #150 Wheeler Street.”

N9.8 Jones River

Season open: 12/1 – 4/30 inclusive Rainfall action level/closure: > 1.00"/3 days

“The waters and flats of the Jones River in the City of Gloucester, west of a line drawn from the marked boulder on Point Field south to the house on Ram Island, and then from the pier on Ram Island due south to Pearce Island, and west of the flagged markers in the strait north of Rust Island, and then east of a line drawn from flagged marker at the easternmost point of upland on the YMCA Camp Spindrift property south and east to the southwest corner of 50 R Crafts Road.”

N9.10(formerly N9.3S) Little River South

Season open: 10/15 - 5/15 inclusive Rain action level/closure: > 0.50"/5 days

“The waters and flats of the Little River, south of a line drawn from the stone pier at Stanwood Point Landing to the split rock at Susan Point and east of a line drawn due south across the mouth of Thurston Creek from the granite pier on Presson Point.”

N9.11(formerly N9.3N) Little River North

Season open: 10/15 - 5/15 inclusive Rain action level/closure: > 1.00"/5 days

“The waters and flats of the Little River, north of a line drawn from the stone pier at Stanwood Point Landing to the split rock at Susan Point, west of a line drawn from #5 King Phillip Road north to Biskie Head on Rust Island, and southeast of a line drawn from Susan Point to the most northwesterly point of upland on the Nichol’s Candy property in the City of Gloucester.”

N9.12(formerly N9.S) the Sandbar

Rain action level/closure: > 1.00"/3 days

"The waters, flats and tributaries of the Gloucester shoreline in the Annisquam River from the Boston & Maine Railroad Bridge north to the Route 128 highway bridge and east of an imaginary line drawn from #5 King Phillip Road north to Biskie Head on Rust Island; excluding the area known as Hucks Cove."

N9.16 Cambridge Beach

Rain action level/closure: > 1.00"/3 days

"The waters and flats of Cambridge Beach on the eastern shore of the Annisquam River in the City of Gloucester from Babson Point north to the spindle."

N9.17 Norwood Heights Beach

Rain action level/closure: > 1.00"/3 days

"The waters and flats of Norwood Heights Beach in the Annisquam section of the City of Gloucester from the spindle north to Wigwam Point."

N9.19 Goose Cove

Rain action level/closure: > 0.50"/3 days, 6/1 - 9/30 inclusive Rain action level/closure: > 1.00"/3 days, 10/1 - 5/31 inclusive

"The waters and flats of Goose Cove in the City of Gloucester."

N9.20 Wheeler's Point

Rain action level/closure: > 0.50"/3 days, 6/1 – 10/31 inclusive Rain action level/closure: > 1.00"/3 days, 11/1 - 5/31 inclusive

"The waters and flats of the eastern shore of the Annisquam River from the southern lot line at #150 Wheeler Street northerly to the first stone & wood pier at #6 Riverside in the City of Gloucester."

N9.23 Jones River Marshes South

Season open: 12/1 – 4/30 inclusive Rainfall action level/closure: > 1.00"/3 days

"The waters and flats of the Jones River in the City of Gloucester east of the flagged markers in the strait north of Rust Island and west of a line drawn from the flagged marker on a point of upland point on Pearce Island south and west to the northeast corner of 62 Crafts Road."

N9.24 Jones River Marshes North

Season open 12/1-4/30 inclusive. Rainfall action level/closure >1.00"/3 days

"The waters and flats of the Jones River in the City of Gloucester, east of a line drawn from the marked boulder on Point Field south to the house on Ram Island and then east of a line drawn from the pier on Ram Island due south to Pearce Island and west of a line drawn from the flaggedmarker at the southeastern end of 232 Atlantic Street south and west to the eastern most point of Pearce Island."

II. Factors Determining "Conditional" Classification

Analysis of all of the classification stations as it pertains to the relationship of rainfall amounts to fecal coliform levels indicates that rainfall does play a role in coliform loading. This role is immediate and of a short duration. Water quality, and therefore rainfall effects, in the river also vary on a seasonal basis in some areas. Cape Ann is a popular summer vacation destination in New England. Gloucester's year round population of 28,000 people increases to approximately 43,000 in the summer months. Many areas along the river still have seasonal cottages only in use during these summer months.

The Gloucester Waste Water Treatment Facility is located at the southern end of the Annisquam River adjacent to the Blynman Canal. The collection system and associated pump stations do not have any discharge points into the river or its tributaries. The facility itself also does not have a discharge point other than the main outfall located in 90' of water outside of the mouth of Gloucester Harbor. However, in the past under emergency conditions, effluent has been diverted to a storm drain located in the parking lot of the facility. This storm drain flows into the Annisquam River on the opposite shore from the High School Boat Ramp. Water quality testing done following discharge into this storm drain indicates that negative impacts from the effluent rarely extend up into the river beyond the B&M Railroad Bridge. The furthest north into the river that effluent has ever been detected is in the Little River. No impacts have ever been detected north of the Route 128 Bridge. Conditionally Approved shellfish areas which could potentially be impacted are N9.12, N9.10, and N9.11. The last time discharges were made by the plant into this storm drain was in 2007 under extreme weather conditions. Several improvements have been made to the treatment plant and sewerage collection system since then making the potential for the use of this storm drain unlikely. However, because the possibility exists for the storm drain's use, notification procedures are outlined in the following pages.

Shellfish area N9.3, the Mill River, closes for 3 days after rainfall amounts greater than or equal to 0.50" in a twenty four hour period. The watershed for this shellfish area is limited to the upland making rainfall impacts of a short duration. However, this area is not as well flushed as the main stem of the Annisquam River and a lower rainfall action level was necessary. The homes which border this area have all been tied into the city sewer line.

Shellfish area N9.19, Goose Cove, closes for 3 days after rainfall amounts greater than or equal to 0.50" in a 24 hour period for the months of June through September. During the months of October through May, the area closes for 3 days after greater than or equal to 1.00" of rain in a 24 hour period. This area is not as well flushed as the main stem of the Annisquam River and a seasonally-lower rainfall action level was needed to manage this area. All of the homes which border this area have all been tied into the city sewer line.

Shellfish area N9.20, Wheeler's Point, closes for 3 days after rainfall amounts greater than or equal to 0.50" in a twenty four hour period for the months of June thru October. During the months of November through May, the area closes for 3 days after greater than or equal to 1.00" of rain in a 24 hour period. The watershed for this area is limited to the upland making rainfall impacts of short duration. The homes which border this area have all been tied into the city sewer line. N9.20 has been used as a soft shell clam relay area.

Shellfish area N9.5, Montgomery's, closes on rainfall amounts greater than or equal to 1.00" in a twenty four hour period. The watershed for this area is limited by the granite ridges which frame the area making rainfall effects of a short duration. The area closes for 3 days after the 1.00" action level is reached. This area was only open seasonally when it first opened in 1997. Water quality has improved in this area as the City's Phase II Water Pollution Abatement Program has been implemented.

Shellfish area N9.6, which includes Lower Flat and Back Creek, closes for 3 days after rainfall greater than or equal to 1.00" in a 24 hour period. The effects of rainfall > 1.00" in a 24 hour period are of a short duration.

Shellfish area N9.7 encompasses the western shore of the Annisquam River. This area is very well flushed and is the least populated of the Annisquam River shellfish areas. The area closes on greater than or equal to 1.00" of rain in a 24 hour period.

Shellfish area N9.8, the Jones River, is open seasonally from December 1 through April 30 and closes after 1.00" of rain in a 24 hour period, remaining closed until the Division of Marine Fisheries can evaluate that the area's water quality has returned to acceptable levels. The area has one of the largest watersheds in the Annisquam River complex. Fecal coliform loading from pollution sources, primarily from a group of pipes found at the most upstream location of the intertidal portion of the river, increases drastically after 1.00" of rain. During the spring and fall, increased rainfall and an elevated water table result in the same drastic increases in fecal coliform loading. Increases in summer land use in the watershed also negatively effect water quality in the river. These increases necessitate closing the Jones River under those conditions.

Shellfish area N9.9 is comprised of both Plummer's Cove and Wheeler's Cove. The waters of both these shallow coves are comprised of the main channel of the Annisquam River. Both coves are well flushed and receive little fresh water input from the upland. Rainfall effects after > 1.00" of rain in a 24 hour period are of a short duration. This results in a 3 day closure following the 1.00" action level.

Rainfall levels greater than or equal to .50" in a twenty four hour period cause elevated fecal coliform levels in the Little River, N9.10, at its southern extremity. The northern portion of the Little River, N9.11, is negatively impacted on rainfall amounts greater than or equal to 1.00" in a twenty four hour period. The negative impacts of these elevated fecal coliform levels are seen for a longer duration in the Little River than in other portions of the Annisquam River complex. Its watershed is more extensive than other Annisquam River shellfish areas. Rainfall closures in the Little River extend for 5 days for both Little River north and Little River south. The Little River shellfish areas are only opened to shellfishing on a seasonal basis from October 15th through May 15th.

The Sandbar and Wolf Hill, shellfish area N9.12, close on rainfalls > 1.00" in 24 hour period for a duration of 3 days. The water quality of this area is governed by the main channel of

the Annisquam River. There is relatively little influence from fresh water sources in the immediate upland. Rainfall effects are of a short duration and the area is very well flushed with each tide. Shellfish areas N9.16, Cambridge Beach, and N9.17, Norwood Heights, are small shellfish areas located at the mouth of the Annisquam River as it enters Ipswich Bay. Both areas close on rainfalls > 1.00" in 24 hour period for a duration of 3 days. Rainfall effects are of a short duration and the areas are very well flushed with each tide.

These conditions are predictable and manageable making the Annisquam River and its tributaries appropriate for Conditionally Approved classification.

III. Description of Predictable Pollution Events

A. Wastewater Treatment Facility

Gloucester Water Pollution Control Facility (WPCF)

Gloucester WPCF Reporting of Wastewater Treatment or Wastewater Collection System Incidences: In the event of any planned or unplanned maintenance event malfunction, damage of the wastewater treatment plant, sewerage pump station or step system, or damage of the wastewater collection system which results in the discharge of raw or treated wastewater to the ground or the potential or actual discharge to a water body or storm drain or if wastewater treatment is bypassed or the storm drain outlet at Essex Avenue is used, then the following notification procedure shall be followed immediately:

Gloucester WPCF contract plant operators, pump station operators and DPW personnel are to call: City of Gloucester Environmental Engineer (Larry Durkin- Office (978) 281-9792, Cell (978) 360 – 9146. The Environmental Engineer will contact:

1. Gloucester Shellfish Warden Pete Seminara- office (978) 325-5248, Cell (978) 949-1223 2. Mass DEP 24 hour Emergency Response Line (888) 304 -1133 3. Division of Marine Fisheries, Shellfish Project. If the Gloucester WPCF is unable to reach the Gloucester Shellfish Warden directly, they shall call MDMF by phone (978- 282-0308 x160 and email Shellfish.newburyport@state.ma.us immediately.

(If the Environmental Engineer is unavailable and does not answer a phone call, text or email directly, then City of Gloucester WPCF Contract Operation and DPW personnel are to call the agencies/individuals listed above.)

If, due to aforementioned conditions, the water quality of the river is determined to be significantly degraded, the Division of Marine Fisheries will close the area, or a portion thereof for a period deemed reasonable. MDMF will decide if water samples are needed to reopen the closed area.

B. Hydrographic and Meteorological Characteristics

Meteorologically, the area experiences a variety of influences with observable seasonal patterns over some flats. Wind direction and velocity vary throughout the year with northwesterly winds predominating. Fall and winter winds tend to be northerly with stronger, more short-lived northwesterly and northeasterly events occasionally developing.

The amount and duration of precipitation directly affects the introduction of coliform and other substances into the area. Sampling following rainfall events indicates that they have measurable influence on the area's water quality. Storm water runoff impacts the area throughout with the Little River, Jones River, and western shore of the Annisquam contributing drainage from marshes, saltponds, and relatively sparse dwelling developments via creeks, street runoff and storm drains. The eastern shore's storm water runoff, on the other hand, is collected in a thickly developed residential environment via street runoff and storm drains with minimal vegetative zones.

C. Seasonal Events

1. Marinas. There are 4 marinas in the Annisquam River. Only one of these marinas is located in a conditionally approved shellfish area. Heron's Way Marina is located in the shellfish area N9.11 "Little River North". Little River is currently closed during the months that the marina is in operation. There is an anchorage for small boats located off of Montgomery's and at the tip Wheeler's Point, but none of the boats are live-aboards.

2. Seasonal tourism. The local population increases dramatically during the summer months. Many of the areas along the Annisquam River still have seasonal cottages which only open in the summer months. A campground located in the Jones River watershed opens during the summer months.

3. Waterfowl, including various gulls, ducks, and geese, frequent the area year round. Numbers range from single digits to large flocks of ducks and geese rafting in various locations. Large numbers of cormorants can be found in the river during their fall and spring migrations. Even with these numbers, fecal coliform geometric means analysis has not indicated a condition that can be predicted, nor has it demonstrated that waterfowl are a problem.

IV. Implementation of Conditional Area Closure

1. The primary Gloucester rain gauge is installed at the Gloucester WPCF. This digital rain gauge records to the 100th of an inch and can be remotely accessed. In case of mechanical failure, measurements from a backup gauge can be used, but must be noted in the logbook. If both gauges are unable to be read, the aforementioned conditionally approved areas the City of Gloucester will not be allowed to open for shellfishing on that given day. Circumstances causing the incident must be noted in the logbook. The logbook will be updated by the Shellfish Department.

2. A second rain gauge located at Gloucester WPCF will be used as the backup rain gauge in the case of mechanical failure of the primary rain gauge. Staff employees routinely read the gauge at 0700.
3. If rain/snow has fallen within the previous 24 hour period, the Shellfish Department will access the WPCF rain gauge via the internet at **5:00 AM** and record in a logbook the amount of rainfall. If the reading is not taken by **5:00 AM**, the aforementioned conditionally approved areas in the City will not be allowed to open for shellfishing on that given day, unless the backup rain gauge is used. Circumstances causing the incident must be noted in the logbook.
4. If greater than or equal to 0.50 inches of rain or greater than or equal to 1.00 inches of rain are recorded at **5:00 AM**, the Shellfish Department will immediately contact the Division of Environmental Law Enforcement Radio Room with area closures via email. The Shellfish Department will also contact the Massachusetts Division of Marine Fisheries in Gloucester via email.
5. A copy of the rainfall logbook shall be sent by the City to the Division of Marine Fisheries Shellfish Program in Gloucester at the end of each month.
6. The status of N9 and its subunits will be available by phone at the Shellfish Department, City Hall (TEL: 978-281-9741). When rain/snow has fallen in the past 24 hours, diggers are responsible to know the status of N9 and its subunits prior to shellfishing. If the City has not determined the status of N9 and its subunits by **5:15 AM**, diggers must wait to begin shellfishing until the Shellfish Department answering machine recording has been updated.
7. Should the backup rain gauge be used, the answering machine at the Shellfish Department, (TEL: 978-281-9741) will be updated by **5:15 AM** with any delays. When rain/snow has fallen in the past 24 hours, diggers are responsible to know the status of N9 and its subunits before leaving the landing/dock. When the backup rain gauge is used, diggers must wait to begin shellfishing until the City can determine the status of N9 and its subunits and the Shellfish Department answering machine recording has been updated.
8. Year round, if the amount of rain recorded at the aforementioned rain gauge station at **5:00 AM** is greater than or equal to 1.00 inches, the status of N9.5, N9.6, N9.7, N9.9, N9.12, N9.16 and N9.17 shall change to closed to shellfish harvesting for three complete days. A complete day is defined as a twenty-four hour period starting at **5:00 AM**. Shellfishing may resume on the fourth day following cessation of the rainfall event.
9. If the amount of rain recorded at the aforementioned rain gauge station at **5:00 AM** is greater than or equal to 0.50 inches, the status of N9.3 and N9.20 shall change to closed to shellfish harvesting for three complete days. A complete day is defined as a twenty-four hour period starting at **5:00 AM**. Shellfishing may resume on the fourth day following cessation of the rainfall event.

10. During the period of 6/1 - 9/30, if the amount of rain recorded at the aforementioned rain gauge station at **5:00 AM** is greater than or equal to 0.50 inches, the status of N9.19 shall change to closed to shellfish harvesting for three complete days. A complete day is defined as a twenty-four hour period starting at **5:00 AM**. Shellfishing may resume on the fourth day following cessation of the rainfall event.

11. During the period of 10/1 - 5/31, if the amount of rain recorded at the aforementioned rain gauge station at **5:00 AM** is greater than or equal to 1.00 inches, the status of N9.19 shall change to closed to shellfish harvesting for three complete days. A complete day is defined as a twenty-four hour period starting at **5:00 AM**. Shellfishing may resume on the fourth day following cessation of the rainfall event.

12. During the period of 10/15 - 5/15, if the amount of rain recorded at the aforementioned rain gauge station at **5:00 AM** is greater than or equal to 0.50 inches, the status of N9.10 shall change to closed to shellfish harvesting for five complete days. A complete day is defined as a twenty-four hour period starting at **5:00 AM**. Shellfishing may resume on the sixth day following cessation of the rainfall event.

13. During the period of 10/15 - 5/15, if the amount of rain recorded at the aforementioned rain gauge station at **5:00 AM** is greater than or equal to 1.00 inches, the status of N9.11 shall change to closed to shellfish harvesting for five complete days. A complete day is defined as a twenty-four hour period starting at **5:00 AM**. Shellfishing may resume on the sixth day following cessation of the rainfall event.

*14. During the period of 12/1 – 4/30, if the amount of rain recorded at the aforementioned rain gauge station at **5:00 AM** is greater than or equal to 1.00 inches, the status of N9.8 shall change to closed for shellfish harvesting until the water quality samples are collected from the area and demonstrate a return to acceptable levels as established by the NSSP. Shellfishing may resume once the City has been notified by the Division of Marine Fisheries.*

15. Under conditions that do not exceed the established rainfall standard, precipitation or runoff amounts that may result in excessive loading of coliform bacteria, e.g., rains causing melting of significant amounts of snow or several consecutive days of rain, the MDMF may close the area to shellfishing for a period of time deemed appropriate.

16. If, due to the discharge of raw or treated sewerage to the growing area, the water quality of the growing area is determined to be significantly degraded, MDMF may close the area to shellfishing for a period of time deemed appropriate.

17. At such time as the area reverts to a “closed” status due to degraded water quality, anyone shellfishing in the conditional areas shall be required to stop harvesting shellfish, report to the appropriate shellfish officer on site, then vacate the area.

18. If fecal coliform levels in water samples collected in the conditionally approved portions of the River exceed the NSSP criteria to maintain an "open" status for the harvest of shellfish, MDMF shall immediately notify the Gloucester Shellfish Department and close the area to shellfishing.

19. The City of Gloucester shall produce a shellfish management plan that lists the City's rules and regulations for the harvesting of shellfish. This plan, along with a copy of the "Conditional Area Management Plan" will be issued to each commercial fisherman. By signing a shellfishing license, fishermen acknowledge receipt and understanding of the plans. A copy of each signed shellfishing license and/or application for the license will be maintained by the City.

20. Shellfishing in an area which has been closed to harvesting is in violation of Massachusetts General Laws, Chapter 130, sections 74A and 75. Constables or their deputies from the City of Gloucester must provide sufficient patrols to intervene in the illegal harvest of shellfish when the shellfish flats of N9 "Annisquam River & Gloucester Harbor" are "closed" to the harvesting of shellfish. Sufficient patrols must be present when N9 flats are "open" to enforce provisions of local and state management plans and to intervene in the illegal harvest of shellfish from adjacent closed areas.

V. Re-opening Criteria

Rainfall Closure:

Rainfall closures are based on previous events and historic data. MDMF has collected samples from stations around the Annisquam River following rainfall events. The criteria for reopening areas under 'routine' events are set in the Closure Policy.

Emergency Closures:

If the area is closed due to an unusual storm event, a rain event in excess of 3.00 inches during a twenty four hour period, or a discharge of raw or treated sewerage from the Gloucester WPCF or its collection system, MDMF may close the area to shellfishing for a period of time deemed appropriate. Retesting is not mandatory.

If the area is closed due to a biotoxin/red tide/psp event , MDMF will close the area to shellfishing for a period of time in conformance with National Shellfish Sanitation Program standards and the Massachusetts Biotoxin Plan. Retesting is mandatory.

As detailed in the MDMF Rainfall Policy, the Annisquam River generally flushes within one day following an inch rainfall with two days added for natural shellfish depuration. The following areas are exceptions. The Little River-south flushes within three days following a half inch rainfall from October 15th through May 15th with two days added for natural shellfish depuration. The Little River-north flushes within three days following an inch of rainfall from October 15th through May 15th with two days added for natural depuration. Goose Cove flushes within one day following a half inch of rainfall from June 1st through September 30th with two days added for natural depuration. The Jones River flushes within one day following an inch of rainfall from December 1st through April 30th with two days added for natural depuration. The Mill River and Wheeler's Point flush within one day following a half inch rainfall from June through October. Two days are added to these areas for natural shellfish depuration.

VI. Synopsis of Effectiveness and Cooperation

The above-mentioned descriptions and procedures should effectively manage the conditional shellfish area and ensure the public health. Water quality as it relates to rain events, seasonality and other pollution factors will be monitored on at least a monthly basis by MDMF with appropriate adjustments in conditional elements.

Cooperation among the City departments involved and the MDMF has been outstanding. Not only has the Shellfish Department been a willing participant in the monitoring of the area, the Shellfish Department, the Board of Health, and the DPW have been extremely helpful in mitigative efforts to eliminate pollution sources.

Based on the conditions described in this management plan, classification of portions of N9 as "Conditionally Approved" is appropriate, safe, predictable and manageable.

Commonwealth of Massachusetts
Division of Marine Fisheries 251 Causeway Street, Suite 400 Boston, Massachusetts 02114
(617)626-1520 fax (617)626-1509

David E. Pierce, Ph.D.
Director
March 8, 2018

Charles D. Baker
Governor Karyn E. Polito Lieutenant Governor Matthew A. Beaton
Secretary Ronald Amidon
Commissioner Mary-Lee King Deputy Commissioner

MEMORANDUM OF UNDERSTANDING

The Massachusetts Division of Marine Fisheries has determined that portions of shellfish growing area N9, Gloucester Harbor and the Annisquam River, in the City of Gloucester Massachusetts meet the National Shellfish Sanitation Program (NSSP) criteria for a conditionally approved classification based upon season and established rainfall amounts.

The Division of Marine Fisheries and the City of Gloucester agree that the shellfish areas currently defined in the attached "Conditional Area Management Plan, Annisquam River - Gloucester Harbor" and classified as "CONDITIONALLY APPROVED" shall be opened to shellfish harvesting and managed under the conditions stipulated in the "Conditional Area Management Plan."

This Memorandum of Understanding may be modified at any time by mutual consent due to changes affecting the classification of the harvest area or general operation of this MOU. Changes become effective after all parties have received modifications in writing.

Failure by any party to adhere to the conditions of this MOU and/or the conditions and compliance items of the "Conditional Area Management Plan, Annisquam River - Gloucester Harbor" will cause the Division of Marine Fisheries to immediately change the status of the affected area(s) to "closed to shellfishing". If law enforcement in selected area(s) of the Annisquam River is determined by the Division of Marine Fisheries to be inadequate, the Division may immediately change the status of an area to "closed to shellfishing."

The Division of Marine Fisheries may, at any time, change the status of the conditional areas to "closed to shellfishing" to ensure public health and safety. If these conditions become unmanageable to any of the below signed parties, the status of the affected area(s) will revert to "closed" 30 days after receiving written notice.

CITY OF GLOUCESTER

Sefatla Romeo Theken Mayor
Larry Durkin Environmental Engineer
Tammy Cominelli Shellfish Constable

COMMONWEALTH OF MASSACHUSETTS

Division of Marine Fisheries
Dani Sure
David E. Pierce Director

Dear Mayor Romeo Thekan:

In accordance with Chapter 130, Section 74A of the Massachusetts General Laws, the Division of Marine Fisheries has closed the below newly defined portions of N:9 "Annisquam River" in the City of Gloucester due to elevated fecal coliform levels discovered in the Jones River. As a result DMF is redefining N:9.7 "Annisquam River" and is creating two new areas (N:9.22 and N:9.23) and has closed both new areas to shellfishing, effective as of sunrise on August 10, 2019.

Under authority of Chapter 130, Section 74A, the below defined areas shall be closed to the taking of all shellfish. All permits issued under the authority of 322 CMR 7.01 are hereby conditioned in accordance with 322 CMR 7.01 (7) to prohibit digging, harvesting or collecting and/or attempting to dig, harvest or collect shellfish and the possession or sale of shellfish from the below defined areas.

REDEFINITION CLASSIFICATION: CONDITIONALLY APPROVED STATUS: CLOSED TO SHELLFISHING

N9.22 Jones River Marshes North

The waters and flats of the Jones River in the City of Gloucester, east of a line drawn from the marked boulder on Point Field south to the house on Ram Island and then east of a line drawn from the pier on Ram Island due south to Pearce Island and west of a line drawn from the flagged marker at the southeastern end of 232 Atlantic Street south and west to the eastern most point of Pearce Island.

REDEFINITION CLASSIFICATION: CONDITIONALLY APPROVED STATUS: CLOSED TO SHELLFISHING

N9.23 Jones River Marshes South

The waters and flats of the Jones River in the City of Gloucester east of the flagged markers in the strait north of Rust Island and west of a line drawn from the flagged marker on an point of upland point on Pearce Island south and west to the northeast corner of 62 Crafts Road.

The preceding “CONDITIONALLY APPROVED” areas shall remain in the closed status until examined by the Division and notification is made that these areas have been placed in the open status. Therefore as a result, the Division has redefined the “CONDITIONALLY APPROVED” area N9.7 “Annisquam River” in the City of Gloucester with conditions for rainfall. Therefore, the below defined conditionally approved area shall be opened to the harvest of shellfish for direct human consumption subject to local rules and regulations under authority of Massachusetts General Laws, Chapter 130, Section 52 and the MOU between the City of Gloucester and DMF.

REDEFINITION CLASSIFICATION: CONDITIONALLY APPROVED STATUS: OPEN TO SHELLFISHING

N9.7 Annisquam River

The waters and flats of the western shore of the Annisquam River in the City of Gloucester from the Route 128 highway bridge north to Farm Point, including those flats east of a flagged marker at the southeastern end of 232 Atlantic Street south and west to the eastern most point of Pearce Island, and then from the flagged marker on an point of upland point on Pearce Island south and west to the northeast corner of 62 Crafts Road.

Sincerely,
David E Peirce

cc: R. Amidon, M. King, DFG
P. Moran, MEP D. McKiernan, M. Hickey, J. Kennedy, T. Shields, DMF S. King, DEP
FDA DPH P. Seminara, City of Gloucester Shellfish Constable