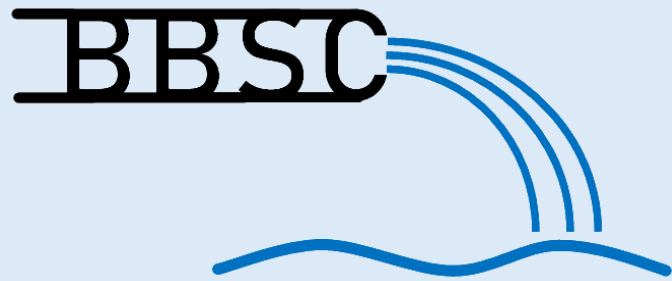


Buzzards Bay Stormwater Collaborative Dashboard

[Link to Dashboard](#)



Interpretation Guide
24 July 2024

Ten Sections with **Emphasis** on Important Information

Marion Outfall Pipe **NSH1058PI** discharges to a Harbor on Front Street. The discharge is Concrete, 12.00 inches and Town owned.

Next Action: Consider Treatment Options

Outfall Description

MS4 Priority: **High**

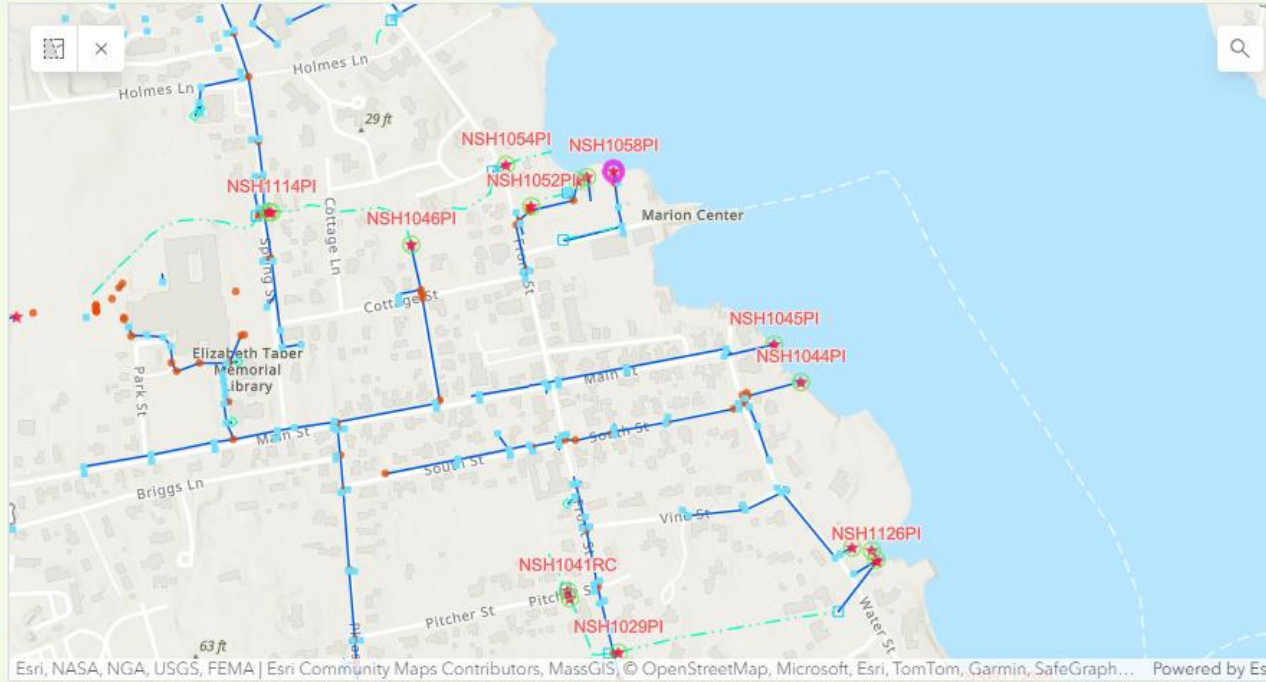
Comments: Biofilter

MS4 Recommendation: **Water quality has some issues but catchment looks good, evaluate treatment system** - 5/3/2024 KPB

Treatment Before: **Yes** Treatment After: **No**

MS4 Interconnection: **No**
 Urbanized: **Yes**
 Environmental Justice: **Yes**
 Sewer Status: **Sewered**
 Flood Zone: **Yes**

Discharge directly to MA95-70



Max Nitrate Dry (ppm)



Max Nitrate Rain (ppm)



Maxar | Esri Community Maps Contributors, Powered by Esri

Catchment Assessment

Inspection Status: **Complete** - 12/6/2018

Issues: **None**

Illicit Connections: **None Found**

Structure Condition: **Good**
 Soil Drainage:
 Soil Hydro Group:

Beach Impact: **High**
 Shellfish Impact:
 Eelgrass Impact: **High**

Dry Weather Flow: **Sampled**
 Dry Water Quality: **3 Illicit Indicators**
 Storm Water Quality: **3 Illicit Indicators**

MassDEP 2022 Integrated List of Waters

MA95-70, Inner Sippican Harbor
 Category 5 ESTUARY, Class: SA, Qualifier: SFO
 Impairments: Estuarine Bioassessments, Nitrogen (Total), Nutrient/Eutrophication Biological Indicators, Fecal Coliform, Dissolved Oxygen

Sample ID	Facility Type	48 Hr Rain	Temperature	Salinity	Ammonia	Chlorine	Nitrate	Surfactants	Enterococcus	Fecal Coliform	Ecoli	Total Nitrogen	Sensory
dry - 7/11/2019	pipe	0.00	26.9 C	1.39 ppt	0.25 ppm	0 mg/l	2.64 ppm	0 ppm	38				none
dry - 7/25/2019	pipe	1.20	23.7 C	0.3 ppt	0.5 ppm	0 mg/l	0.88 ppm	0.25 ppm	80				none
dry - 9/26/2019	pipe	0.00	20.7 C	4.66 ppt	0.5 ppm	4 ppb	1.76 ppm	0.75 ppm	30			0.07 mg/L	none
wet - 10/13/2020	manhole	0.30	14.7 C	0.24 ppt	0.5 ppm	0 ppb	0.88 ppm	0.5 ppm	14000			2.1 mg/L	none



Title Bar

Marion Outfall Pipe **NSH1058PI** discharges to a Harbor on Front Street. The discharge is Concrete, 12.00 inches and Town owned. **Next Action: Consider Treatment Options**

MS4 Priority: **High**
 Comments: Biofilter
 MS4 Recommendation: **Water quality has some issues but catchment looks good, evaluate treatment system.** SCS2024.078
 Treatment Before: **Yes** Treatment After: **No**
 MS4 Interconnection: **No**
 Utilized: **Yes**
 Environmental Justice: **Yes**
 Sewer Status: **Sansewer**
 Flood Zone: **Yes**
 Discharge directly to MA95.70

MA95.70 Near Spillway Harbor
 Category 5 ESTUARINE Class SA Qualifier: SFD
 Impairments: Esuarine Assessments, Nitrogen Total, Nutrient Substitution Biological Indicators, Fecal Coliform, Dissolved Oxygen

Sample ID	Facility Type	48 Hr Rain	Temperature	Salinity	Ammonia	Chlorine	Nitrate	Surfactants	Enterococcus	Fecal Coliform	Ecol	Total Nitrogen	Sensory
dry_7/11/2019	pipe	0.00	26.9 C	1.39 ppt	0.25 ppm	0 mg/l	2.64 ppm	0 ppm	38				none
dry_7/25/2019	pipe	1.20	23.7 C	0.3 ppt	0.5 ppm	0 mg/l	0.88 ppm	0.25 ppm	80				none
dry_9/26/2019	pipe	0.00	25.7 C	4.66 ppt	0.5 ppm	4 ppb	1.76 ppm	0.75 ppm	30			0.07 mg/L	none
wet_10/19/2020	manhole	0.30	14.7 C	0.24 ppt	0.5 ppm	0 ppb	0.88 ppm	0.5 ppm	14000				2.1 mg/L

MA95.70 Beach Impact: **High**
 Shellfish Impact: **None**
 Enrichment Impact: **High**
 Dry Weather Flow: **Sampled**
 Storm Water Quality: **3 Illicit Indicators**

Town

Facility ID

Street Location

Owner of Discharge

Marion Outfall Pipe **NSH1058PI** discharges to a Harbor on Front Street. The discharge is Concrete, 12.00 inches and Town owned. **Next Action: Consider Treatment Options**

Discharge Type:
 Outfall Pipe
 Roadcut
 Stormwater Culvert
 Or Culvert

Discharge Receiver

Pipe material and size

Next step in the MS4 Process

Outfall Description

Outfall Description

MS4 Priority: **High**

Comments: Biofilter

MS4 Recommendation: **Water quality has some issues but catchment looks good, evaluate treatment system - 5/3/2024 KPB**

Treatment Before: **Yes** Treatment After: **No**

MS4 Interconnection: **No**
 Urbanized: **Yes**
 Environmental Justice: **Yes**
 Sewer Status: **Sewered**
 Flood Zone: **Yes**

Discharge directly to MA95-70

MS4 Priority

Recommendation for next action with Date

Stormwater Treatment

MS4 Interconnection in Network

Discharge Location Information

303d Listed Water that Outfall Impacts

Marion Outfall Pipe **NSH105BPI** discharges to a Harbor on Front Street. The discharge is Concrete, 12.00 inches and Town owned. **Next Action: Consider Treatment Options**

Outfall Description
 MS4 Priority: **High**
 Comments: Biofilter
 MS4 Recommendation: **Water quality has some issues but catchment looks good, evaluate treatment system - 5/3/2024 KPB**
 Treatment Before: **Yes** Treatment After: **No**
 MS4 Interconnection: **No**
 Urbanized: **Yes**
 Environmental Justice: **Yes**
 Sewer Status: **Sewered**
 Flood Zone: **Yes**
 Discharge directly to MA95-70

Sample ID	Facility Type	48 Hr Rain	Temperature	Salinity	Ammonia	Chlorine	Nitrate	Sulfurates	Enterococcus	Fecal Coliform	Ecol	Total Nitrogen	Sensory
dry_7/11/2019	pipe	0.00	26.9 C	1.39 ppt	0.25 ppm	0 mg/l	2.64 ppm	0 ppm	38				none
dry_7/25/2019	pipe	1.20	23.7 C	0.3 ppt	0.5 ppm	0 mg/l	0.88 ppm	0.25 ppm	80				none
dry_9/26/2019	pipe	0.00	25.7 C	4.66 ppt	0.5 ppm	4 ppb	1.76 ppm	0.75 ppm	30			0.07 mg/L	none
wet_10/19/2020	manhole	0.30	14.7 C	0.24 ppt	0.5 ppm	0 ppb	0.88 ppm	0.5 ppm	14000				2.1 mg/L

Catchment Assessment
 Inspection Status: **Complete - 12/6/2018**
 Issues: **None**
 Elicit Connections: **None Found**
 Structure Condition: **Good**
 Soil Drainage: **Good**
 Soil Hydro Group: **Good**
 Beach Impact: **High**
 Shellfish Impact: **High**
 Dry Weather Flow: **Sampled**
 Dry Weather Quality: **3 Illicit Indicators**
 Storm Water Quality: **3 Illicit Indicators**

303d Listed Water Information

MassDEP 2022 Integrated List of Waters

MA95-70, Inner Sippican Harbor

Category 5 ESTUARY, Class: SA, Qualifier: SFO

Impairments: Estuarine Bioassessments, Nitrogen (Total), Nutrient/Eutrophication Biological Indicators, Fecal Coliform, Dissolved Oxygen

Category

Listed Water Name

Class and Qualifier

List of Impairments

Marion Outfall Pipe **NSH105BPI** discharges to a Harbor on Front Street. The discharge is Concrete, 12.00 inches and Town owned. **Next Action: Consider Treatment Options**

Outfall Description
 MS4 Priority: **High**
 Comments: Biofilter
 MS4 Recommendation: **Water quality has some issues but catchment looks good, evaluate treatment system.** SCS2024 076
 Treatment Before: **Yes** Treatment After: **No**
 MS4 Interconnection: **No**
 Utilized: **Yes**
 Environmental Justice: **Yes**
 Sewer Status: **Sansewer**
 Flood Zone: **Yes**
 Discharge directly to MA95-70

MassDEP 2022 Integrated List of Waters
MA95-70, Inner Sippican Harbor
Category 5 ESTUARY, Class: SA, Qualifier: SFO
Impairments: Estuarine Bioassessments, Nitrogen (Total), Nutrient/Eutrophication Biological Indicators, Fecal Coliform, Dissolved Oxygen

Sample ID	Facility Type	48 Hr Rain	Temperature	Salinity	Ammonia	Chlorine	Nitrate	Surfactants	Enterococcus	Focal Coliform	Ecol	Total Nitrogen	Sensory
ny_7/11/2019	pipe	0.00	26.9 C	1.39 ppt	0.25 ppm	0 mg/l	2.64 ppm	0 ppm	38			none	
ny_7/25/2019	pipe	1.20	23.7 C	0.3 ppt	0.5 ppm	0 mg/l	0.88 ppm	0.25 ppm	80			0.07 mg/L	
ny_9/26/2019	pipe	0.00	25.7 C	4.66 ppt	0.5 ppm	4 ppb	1.76 ppm	0.75 ppm	30			2.1 mg/L	
ny_10/13/2020	manhole	0.30	14.7 C	0.24 ppt	0.5 ppm	0 ppb	0.88 ppm	0.5 ppm	14000				

Catchment Assessment
 Inspection Status: **Complete - 12/6/2018**
 Issues: **None**
 Illicit Connections: **None Found**
 Structure Condition: **Good**
 Soil Drainage: **Good**
 Soil Hydro Group: **None**
 Beach Impact: **High**
 Shellfish Impact: **High**
 Dry Weather Flow: **Sampled**
 Dry Weather Quality: **3 Illicit Indicators**
 Storm Water Quality: **3 Illicit Indicators**

Main Map – Zoom or Pan as needed

Pipe Inlet

Water Pathways -
Stream or Dry Ditch

Outfall with Facility ID

Selected Discharge
– Focus of
Dashboard

Catchbasins,
Manholes and Pipes

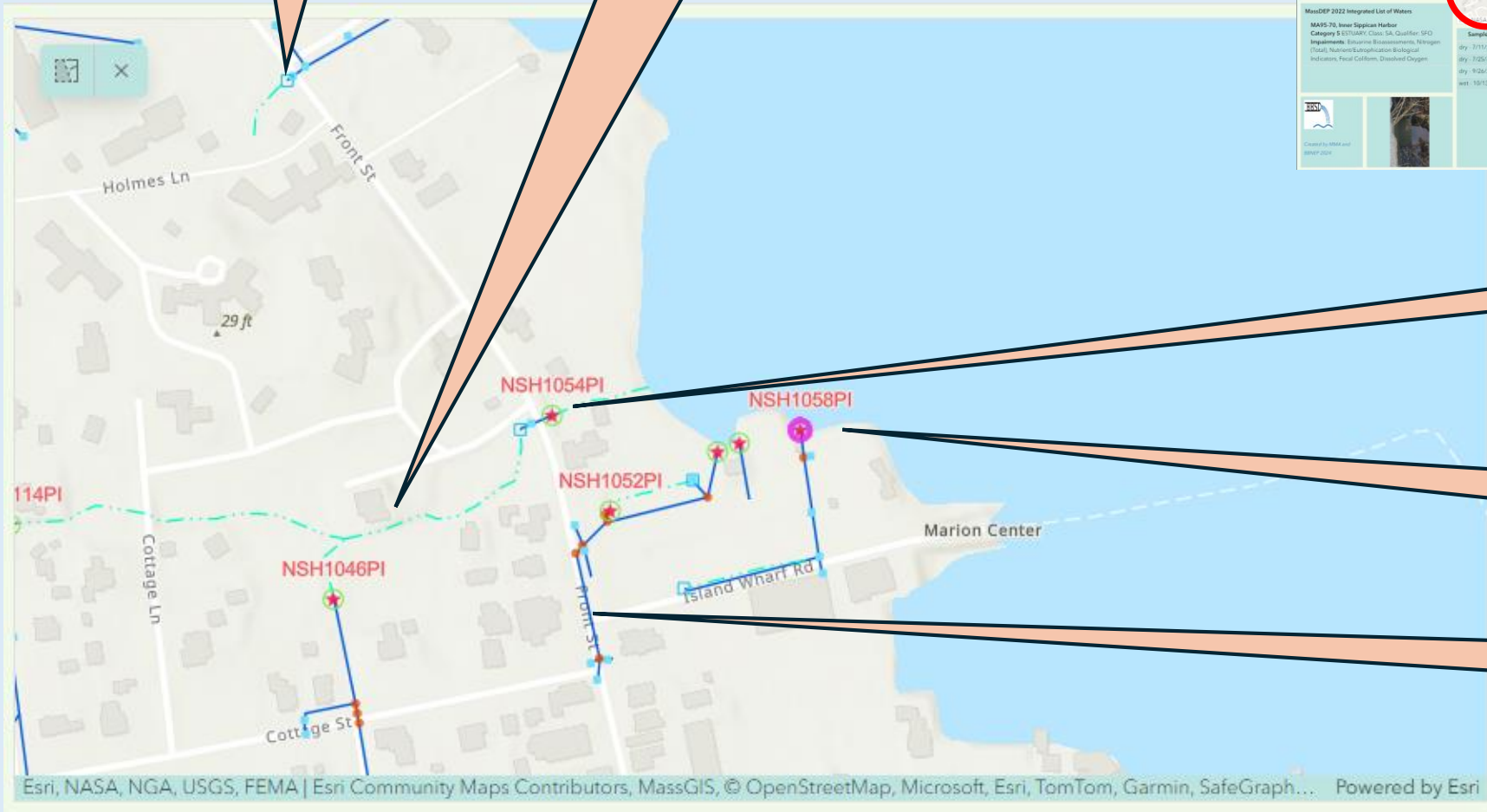
Marion Outfall Pipe **NSH1058PI** discharges to a Harbor on Front Street. The discharge is Concrete, 12.00 inches and Town owned. **Next Action: Consider Treatment Options**

Outfall Description
MS4 Priority: **High**
Comments: Biofilter
MS4 Recommendation: **Water quality has some issues but catchment looks good. Evaluate treatment system.** SCS2004 VPS
Treatment Before: **Yes** Treatment After: **No**
MS4 Interconnection: **No**
Urbanized: **Yes**
Environmental Justice: **Yes**
Sewer Status: **Sansewer**
Flood Zone: **Yes**
Discharge directly to MA95-70

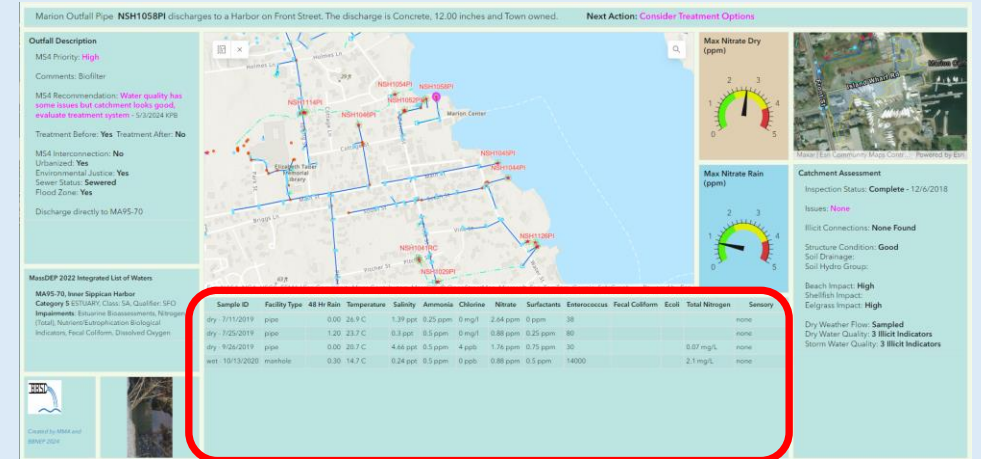
MA95-70 Integrated List of Waters
MA95-70: Near Spillage Harbor
Category 5 ESTUARY Class SA, Qualifier: SFD
Impairments: Estuarine Assessments, Nitrogen
Local: Nutrient Substructure Biological
Indicators: Fecal Coliform, Dissolved Oxygen

Sample ID	Facility Type	48 Hr Rain	Temperature	Salinity	Ammonia	Chlorine	Nitrate	Sulfate	Enterococcus	Fecal Coliform	Ecol	Total Nitrogen	Sensory	
dry_7/11/2019	pipe	0.00	26.9 C	1.39 ppt	0.25 ppm	0 mg/l	2.64 ppm	0 ppm	38				none	
dry_7/25/2019	pipe	1.20	23.7 C	0.3 ppt	0.5 ppm	0 mg/l	0.88 ppm	0.25 ppm	80				none	
dry_9/26/2019	pipe	0.00	25.7 C	4.66 ppt	0.5 ppm	4 ppb	1.76 ppm	0.75 ppm	30			0.07 mg/L	none	
wet_10/19/2020	manhole	0.30	14.7 C	0.24 ppt	0.5 ppm	0 ppb	0.88 ppm	0.5 ppm	14000				2.1 mg/L	none

Catchment Assessment
Inspection Status: **Complete** - 12/6/2018
Issues: **None**
Bilic Connections: **None Found**
Structure Condition: **Good**
Soil Drainage: **Good**
Soil Hydro Group:
Beach Impact: **High**
Shellfish Impact:
Enfranch Impact: **High**
Dry Weather Flow: **Sampled**
Dry Water Quality: **3 Illicit Indicators**
Storm Water Quality: **3 Illicit Indicators**



Water Quality Data



Where Sample was Collected

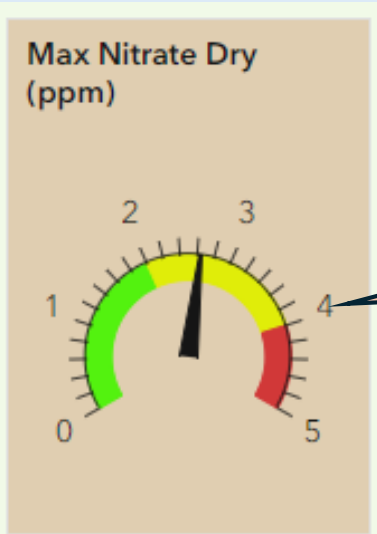
Sample Type and Date

Rain Amount in Past 48 Hours

Results

Sample ID	Facility Type	48 Hr Rain	Temperature	Salinity	Ammonia	Chlorine	Nitrate	Surfactants	Enterococcus	Fecal Coliform	Ecoli	Total Nitrogen	Sensory
dry - 7/11/2019	pipe	0.00	26.9 C	1.39 ppt	0.25 ppm	0 mg/l	2.64 ppm	0 ppm	38				none
dry - 7/25/2019	pipe	1.20	23.7 C	0.3 ppt	0.5 ppm	0 mg/l	0.88 ppm	0.25 ppm	80				none
dry - 9/26/2019	pipe	0.00	20.7 C	4.66 ppt	0.5 ppm	4 ppb	1.76 ppm	0.75 ppm	30			0.07 mg/L	none
wet - 10/13/2020	manhole	0.30	14.7 C	0.24 ppt	0.5 ppm	0 ppb	0.88 ppm	0.5 ppm	14000			2.1 mg/L	none

Nitrate Meters



Maximum Nitrate Sampled during Dry Weather



Maximum Nitrate Sampled during Storm Event

Marion Outfall Pipe **NSH105BPI** discharges to a Harbor on Front Street. The discharge is Concrete, 12.00 inches and Town owned. **Next Action: Consider Treatment**

Outfall Description
 MS4 Priority: **High**
 Comments: Biofilter
 MS4 Recommendation: **Water quality has some issues but catchment looks good. Evaluate treatment system.** S/C/S/O/S/P/S
 Treatment Before: **Yes** Treatment After: **No**
 MS4 Interconnection: **No**
 Urbanized: **Yes**
 Environmental Justice: **Yes**
 Sewer Status: **Sansewer**
 Flood Zone: **Yes**
 Discharge directly to MA95-70

Map
 A map showing the location of the Marion Outfall Pipe (NSH105BPI) in a city area, with various pipes and catchments labeled.

Max Nitrate Dry (ppm)
 A gauge showing a reading of approximately 3.5 ppm, highlighted with a red box.

Max Nitrate Rain (ppm)
 A gauge showing a reading of approximately 1.5 ppm, highlighted with a red box.

MA95-70 Near Spigone Harbor
 Category 5 ESTUARINE Class SA, Qualifier: SFD
 Impairments: Estuarine Assessments, Nitrogen
 Critical Numbers/Subpopulation Biological Indicators, Fecal Coliform, Dissolved Oxygen

Sample ID	Facility Type	48 Hr Rain	Temperature	Salinity	Ammonia	Chlorine	Nitrate	Surfactants	Enterococcus	Fecal Coliform	Ecology
dry_7/11/2019	pipe	0.00	26.9 C	1.39 ppt	0.25 ppm	0 mg/l	2.64 ppm	0 ppm	38		none
dry_7/25/2019	pipe	1.20	23.7 C	0.3 ppt	0.5 ppm	0 mg/l	0.88 ppm	0.25 ppm	80		none
dry_9/26/2019	pipe	0.00	25.7 C	4.66 ppt	0.5 ppm	4 ppb	1.76 ppm	0.75 ppm	30		0.07 mg/L
wet_10/19/2020	manhole	0.30	14.7 C	0.24 ppt	0.5 ppm	0 ppb	0.88 ppm	0.5 ppm	14000		2.1 mg/L

Catchment Assessment
 Inspection Status: **Complete** - 12/6/2018
 Issues: **None**
 Illicit Connections: **None Found**
 Structure Condition: **Good**
 Soil Drainage: **Good**
 Soil Hydro Group:
 Beach Impact: **High**
 Shellfish Impact:
 Eutrophication Impact: **High**
 Dry Weather Flow: **Sampled**
 Dry Weather Quality: **3 Illicit Indicators**
 Storm Water Quality: **3 Illicit Indicators**

Catchment Map

Marion Outfall Pipe **NSH105BPI** discharges to a Harbor on Front Street. The discharge is Concrete, 12.00 inches and Town owned. **Next Action: Consider Treatment Options**

Outfall Description
 MS4 Priority: **High**
 Comments: Biofilter
 MS4 Recommendation: **Water quality has some issues but catchment looks good, evaluate treatment system.** SCS2024.078
 Treatment Before: **Yes** Treatment After: **No**
 MS4 Interconnection: **No**
 Urbanized: **Yes**
 Environmental Justice: **Yes**
 Sewer Status: **Sansewer**
 Flood Zone: **Yes**
 Discharge directly to MA95.70

Max Nitrate Dry (ppm)

Max Nitrate Rain (ppm)

Catchment Assessment
 Inspection Status: **Complete - 12/6/2018**
 Issues: **None**
 Illicit Connections: **None Found**
 Structure Condition: **Good**
 Soil Drainage: **Good**
 Soil Hydro Group:
 Beach Impact: **High**
 Shellfish Impact:
 Eutrophication Impact: **High**
 Dry Weather Flow: **Sampled**
 Dry Weather Quality: **3 Illicit Indicators**
 Storm Water Quality: **3 Illicit Indicators**

MA95.70 Inlet Seaplane Harbor
 Category 5 ESTUARY Class SA, Qualifier: SFD
 Impairments: Esuarine Bioassessments, Nitrogen (Total, Numerical), Subphosphate Biological Indicators, Fecal Coliform, Dissolved Oxygen

Sample ID	Facility Type	48 Hr Rain	Temperature	Salinity	Ammonia	Chlorine	Nitrate	Surfactants	Enterococcus	Fecal Coliform	Ecoli	Total Nitrogen	Sensory
dry_7/11/2019	pipe	0.00	26.9 C	1.39 ppt	0.25 ppm	0 mg/l	2.64 ppm	0 ppm	38			none	
dry_7/25/2019	pipe	1.20	23.7 C	0.3 ppt	0.5 ppm	0 mg/l	0.88 ppm	0.25 ppm	80			none	
dry_9/26/2019	pipe	0.00	25.7 C	4.66 ppt	0.5 ppm	4 ppb	1.76 ppm	0.75 ppm	30			0.07 mg/L	none
wet_10/19/2020	manhole	0.30	14.7 C	0.24 ppt	0.5 ppm	0 ppb	0.88 ppm	0.5 ppm	14000			2.1 mg/L	none

Maxar | Esri Community Maps Contr... Powered by Esri



Select Catchment to show Area in Acres

Catchment Area of Selected Outfall – Pan and Zoom as needed

Catchment Assessment

Catchment Assessment

Inspection Status: **Complete - 12/6/2018**

Issues: **None**

Illicit Connections: **None Found**

Structure Condition: **Good**

Soil Drainage:

Soil Hydro Group:

Beach Impact: **High**

Shellfish Impact:

Eelgrass Impact: **High**

Dry Weather Flow: **Sampled**

Dry Water Quality: **3 Illicit Indicators**

Storm Water Quality: **3 Illicit Indicators**

Inspection Status and Outstanding Issues

Illicit Connections if Found

Condition of Storm Drain Structures

Catchment Soils

Potential Impacts to Nearby Waters

Number of Illicit Indicators from Sampling

Marion Outfall Pipe **NSH105BPI** discharges to a Harbor on Front Street. The discharge is Concrete, 12.00 inches and Town owned. **Next Action: Consider Treatment Options**

Outfall Description
 MS4 Priority: **High**
 Comments: Biofilter
 MS4 Recommendation: **Water quality has some issues but catchment looks good. Evaluate treatment systems. SCS2024.076.**
 Treatment Before: **Yes** Treatment After: **No**
 MS4 Interconnection: **No**
 Utilized: **Yes**
 Environmental Justice: **Yes**
 Sewer Status: **Sansewer**
 Flood Zone: **Yes**
 Discharge directly to MA95-70

Sample ID	Facility Type	48 Hr Rain	Temperature	Salinity	Ammonia	Chlorine	Nitrate	Surfactants	Enterococcus	Fecal Coliform	Ecoli	Total Nitrogen	Sensory
dry_7/11/2019	pipe	0.00	26.9 C	1.39 ppt	0.25 ppm	0 mg/l	2.64 ppm	0 ppm	38			none	
dry_7/25/2019	pipe	1.20	23.7 C	0.3 ppt	0.5 ppm	0 mg/l	0.88 ppm	0.25 ppm	80			none	
dry_9/26/2019	pipe	0.00	25.7 C	4.66 ppt	0.5 ppm	4 ppb	1.76 ppm	0.75 ppm	30			0.07 mg/L	none
wet_10/13/2020	manhole	0.30	14.7 C	0.24 ppt	0.5 ppm	0 ppb	0.88 ppm	0.5 ppm	14000			2.1 mg/L	none

Catchment Assessment
 Inspection Status: **Complete - 12/6/2018**
 Issues: **None**
 Illicit Connections: **None Found**
 Structure Condition: **Good**
 Soil Drainage:
 Soil Hydro Group:
 Beach Impact: **High**
 Shellfish Impact:
 Eelgrass Impact: **High**
 Dry Weather Flow: **Sampled**
 Dry Water Quality: **3 Illicit Indicators**
 Storm Water Quality: **3 Illicit Indicators**

Credits and Photograph



Marion Outfall Pipe **NSH105BPI** discharges to a Harbor on Front Street. The discharge is Concrete, 12.00 inches and Town owned. **Next Action: Consider Treatment Options**

Outfall Description
 MS4 Priority: **High**
 Comments: Biofilter
 MS4 Recommendation: **Water quality has some issues but catchment looks good, evaluate treatment system.** SCS2024.076
 Treatment Before: **Yes** Treatment After: **No**
 MS4 Interconnection: **No**
 Urbanized: **Yes**
 Environmental Justice: **Yes**
 Sewer Status: **Sansewer**
 Flood Zone: **Yes**
 Discharge directly to MA95-70

Map
 Map showing the location of the Marion Outfall Pipe (NSH105BPI) in Marion, VA. The map includes a street grid and a red dot indicating the outfall location. A red box highlights a small inset image of the outfall pipe.

Max Nitrate Dry (ppm)
 0 2 3 4 5

Max Nitrate Rain (ppm)
 0 2 3 4 5

Catchment Assessment
 Inspection Status: **Complete - 12/6/2018**
 Issues: **None**
 Illicit Connections: **None Found**
 Structure Condition: **Good**
 Soil Drainage: **Good**
 Soil Hydro Group:
 Beach Impact: **High**
 Shellfish Impact:
 Entgrass Impact: **High**
 Dry Weather Flow: **Sampled**
 Storm Water Quality: **3 Illicit Indicators**

MA95-70 Inland Aquatic Harbor
 Category 5 ESTUARINE Class SA Qualifier: SFD
 Impairments: Estuarine Assessments, Nitrogen
 Critical Numbers/Substation Biological Indicators, Fecal Coliform, Dissolved Oxygen

Sample ID	Facility Type	48 Hr Rain	Temperature	Salinity	Ammonia	Chlorine	Nitrate	Surfactants	Enterococcus	Focal Coliform	Ecoli	Total Nitrogen	Sensory
dry_7/11/2019	pipe	0.00	26.9 C	1.39 ppt	0.25 ppm	0 mg/l	2.64 ppm	0 ppm	38				none
dry_7/25/2019	pipe	1.20	23.7 C	0.3 ppt	0.5 ppm	0 mg/l	0.88 ppm	0.25 ppm	80				none
dry_9/26/2019	pipe	0.00	25.7 C	4.66 ppt	0.5 ppm	4 ppb	1.76 ppm	0.75 ppm	30			0.07 mg/L	none
wet_10/19/2020	manhole	0.30	14.7 C	0.24 ppt	0.5 ppm	0 ppb	0.88 ppm	0.5 ppm	14000			2.1 mg/L	none

Credits with Links to Website and Help

Photograph of Outfall Pipe