

# The following definitions are used to describe nitrogen responsibility:

Unattenuated load: the controllable nitrogen load, in kg, deposited in the watershed

Attenuated load: the controllable nitrogen load, in kilograms (kg), from the watershed that reaches the embayment after the effect of natural attenuation in wetlands or ponds

**Threshold:** the amount of nitrogen, in kg, that a water body can receive and still meet water quality goals; this number is based on Massachusetts Estuaries Project (MEP) technical reports or Total Maximum Daily Load (TMDL) reports

**Reduction target:** the amount of nitrogen, in kg, that needs to be removed from the watershed to achieve the threshold; this number is calculated by subtracting the threshold number from the controllable attenuated load

**Percent contribution:** the percent of controllable attenuated load that a town contributes to the watershed

**Kilogram responsibility:** is calculated by applying the percent contribution to the reduction target and indicates the amount of nitrogen, in kg, that a community is responsible for addressing

# DENNIS: Subembayment Watersheds

# **BASS RIVER**

SUBEMBAYMENT: BASS RIV	/ER LOWER					
Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
26,515	20,833	20,816	17	41%	7	Yarmouth (59%)
SUBEMBAYMENT: BASS RIV	/ER MIDDLE					
Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
22,820	21,751	10,889	10,862	33%	3,565	Yarmouth (67%)
SUBEMBAYMENT: FOLLINS	POND					
Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
11,913	11,586	2,868	8,718	61%	5,361	Yarmouth (39%)
SUBEMBAYMENT: GRAND C	COVE					
Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
2,499	2,328	2,662	N/A	100%	N/A	N/A
SUBEMBAYMENT: KELLEYS	BAY					
Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
6,732	6,671	1,409	5,262	82%	4,324	Brewster (1%), Yarmouth (17%)
SUBEMBAYMENT: MILL PO	ND AND STREAM					
Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
10,198	8,889	2,864	6,025	11%	641	Yarmouth (89%)

## **CHASE GARDEN CREEK**

SUBEMBAYMENT: CHASE GARDEN CREEK

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	<b>Additional Contributing Towns</b>
27,738	27,738	N/A	N/A	52%	N/A	Yarmouth (48%)

# **HERRING RIVER (HARWICH)**

SUBEMBAYMENT: LOWER HERRING RIVER

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
3,267	3,267	3,298	N/A	1%	N/A	Harwich (99%)
SUBEMBAYMENT: UPPER H	IEDDING DIVED					
20REMRAAMENT: OLI CIVI	ILINING INIVLIN					
Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
29 784	16 862	14 106	2 756	7%	182	Brewster (5%) Harwich (88%)

# **QUIVETT CREEK**

SUBEMBAYMENT: QUIVETT CREEK

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	<b>Additional Contributing Towns</b>
4,293	4,293	N/A	N/A	21%	N/A	Brewster (79%)

## **SESUIT HARBOR**

SUBEMBAYMENT: SESUIT HARBOR

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	<b>Additional Contributing Towns</b>
10,511	10,511	N/A	N/A	100%	N/A	N/A

#### **SWAN POND RIVER**

SUBEMBAYMENT: SWAN POND RIVER

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
6,348	6,280	1,848	4,432	96%	4,262	Brewster (3%), Harwich (1%)
JBEMBAYMENT: SWAN PO	OND RIVER NORTH					
JBEMBAYMENT: SWAN PO	OND RIVER NORTH  Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	<b>Additional Contributing Towns</b>
5,204	5,204	1,474	3,730	100%	3,730	N/A