

# 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

## BREWSTER: Subembayment Watersheds

## **BASS RIVER**

#### SUBEMBAYMENT: BASS RIVER 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	<1%	39	Dennis (33%), Yarmouth (67%)
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	1%	47	Dennis (82%), Yarmouth (17%)

# **HERRING RIVER (HARWICH)**

SUBEMBAYMENT: UPPER HERRING RIVER

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	5%	150	Dennis (7%), Harwich (88%)

# LITTLE NAMSKAKET CREEK

#### SUBEMBAYMENT: LITTLE NAMSKAKET MARSH

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
2,654	2,616	*-65	*0	1%	*0	Orleans (99%)

\*Has assimilative capacity

# NAMSKAKET CREEK

### SUBEMBAYMENT: NAMSKAKET MARSH

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
5,490	3,961	0	0	74%	0	Orleans (26%)

## PLEASANT BAY

#### SUBEMBAYMENT: AREYS POND

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
519	363	334	29	6%	2	Orleans (94%)
subembayment: KESCAYC	) GANSETT (LONNIES	) POND				
Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
789	563	593	N/A	2%	N/A	Orleans (98%)
SUBEMBAYMENT: NAMEQU		Threehold (he)	Deduction Toward (I.e.)	Demont Cantribution	Vilamum Daaransikiliku	Additional Contributions Torres
Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
1,024	895	632	263	3%	9	Orleans (97%)
subembayment: PLEASAN	NT BAY					
Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
13,651	13,237	7,979	5,258	22%	1,158	Chatham (6%), Harwich (41%) Orleans (31%)

## BREWSTER: Subembayment Watersheds

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
738	484	394	90	14%	13	Orleans (86%)
SUBEMBAYMENT: TAR KILI	N STREAM					
Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
697	697	1,907	N⁄A	78%	N⁄A	Orleans (22%)
SUBEMBAYMENT: THE RIVE	ER UPPER					
Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
onationuatou Loau (Ng.)					_	
1,460	1,088 <b>K</b>	634	454	1%	7	Orleans (99%)
1,460	K	634	454	1%	7	Orleans (99%)
1,460 QUIVETT CREE	K	634 Threshold (kg.)	454 Reduction Target (kg.)	1% Percent Contribution	7 Kilogram Responsibility	Orleans (99%) Additional Contributing Towns
1,460 <b>QUIVETT CREE</b> subembayment: QUIVETT	<b>K</b> Creek				7 Kilogram Responsibility N/A	
1,460 QUIVETT CREE SUBEMBAYMENT: QUIVETT Unattenuated Load (kg.)	K CREEK Attenuated Load (kg.) 4,293	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution		Additional Contributing Towns
1,460 <b>QUIVETT CREE</b> SUBEMBAYMENT: QUIVETT Unattenuated Load (kg.) 4,293	K CREEK Attenuated Load (kg.) 4,293 VER	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution		Additional Contributing Towns
1,460 QUIVETT CREE SUBEMBAYMENT: QUIVETT Unattenuated Load (kg.) 4,293 SWAN POND RI	K CREEK Attenuated Load (kg.) 4,293 VER	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution		Additional Contributing Towns

# NAUSET MARSH

SUBEMBAYMENT: TOWN COVE

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
10,427	10,287	3,493	6,794	1%	74	Eastham (25%), Orleans (74%)