

# HARWICH

Subembayment Watersheds



## 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

## ALLEN HARBOR

### SUBEMBAYMENT: ALLEN HARBOR

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
3,064	2,692	893	1,799	100%	1,799	N/A

## HERRING RIVER (HARWICH)

### SUBEMBAYMENT: EAST RESERVOIR

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
21	21	107	-86	100%	-86	N/A

### 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	99%	N/A	Dennis (1%)

### 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	88%	2,424	Brewster (5%), Dennis (7%)

## PLEASANT BAY

### SUBEMBAYMENT: MUDDY CREEK LOWER

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
4,147	3,989	780	3,209	69%	2,228	Chatham (31%)

## HARWICH: Subembayment Watersheds

### SUBEMBAYMENT: MUDDY CREEK UPPER

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
60,031	5,131	1,684	3,447	79%	2,729	Chatham (21%)

### SUBEMBAYMENT: PLEASANT 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	41%	2,161	Brewster (22%), Chatham (6%), Orleans (31%)

### SUBEMBAYMENT: ROUND COVE

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
2,199	2,199	1,080	1,119	100%	1,119	N/A

## RED RIVER

### SUBEMBAYMENT: RED RIVER

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
7,796	7,796	N/A	N/A	95%	N/A	Chatham (5%)

## SAQUATUCKET HARBOR

### SUBEMBAYMENT: SAQUATUCKET HARBOR

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
9,882	6,260	3,386	2,874	100%	2,874	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	1%	40	Brewster (3%), Dennis (96%)

## TAYLORS POND/MILL CREEK

### SUBEMBAYMENT: MILL CREEK

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
2,132	2,132	1,106	1,026	19%	191	Chatham (81%)

### SUBEMBAYMENT: TAYLORS POND

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
2,853	2,853	1,464	1,389	14%	193	Chatham (86%)

## WYCHMERE HARBOR

### SUBEMBAYMENT: WYCHMERE HARBOR

Unattenuated Load (kg.)	Attenuated Load (kg.)	Threshold (kg.)	Reduction Target (kg.)	Percent Contribution	Kilogram Responsibility	Additional Contributing Towns
1,227	1,227	241	986	100%	986	N/A

