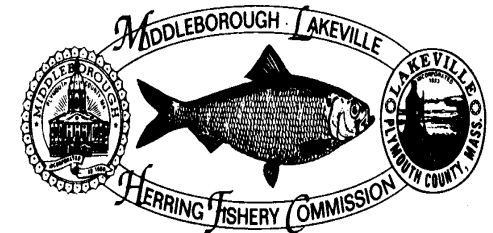
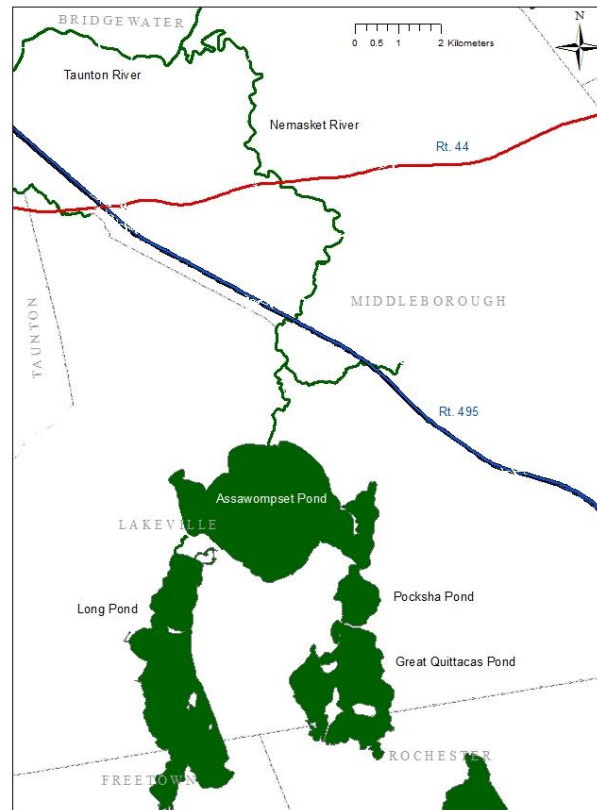


Nemasket River Sustainable Fishery Management Plan for River Herring

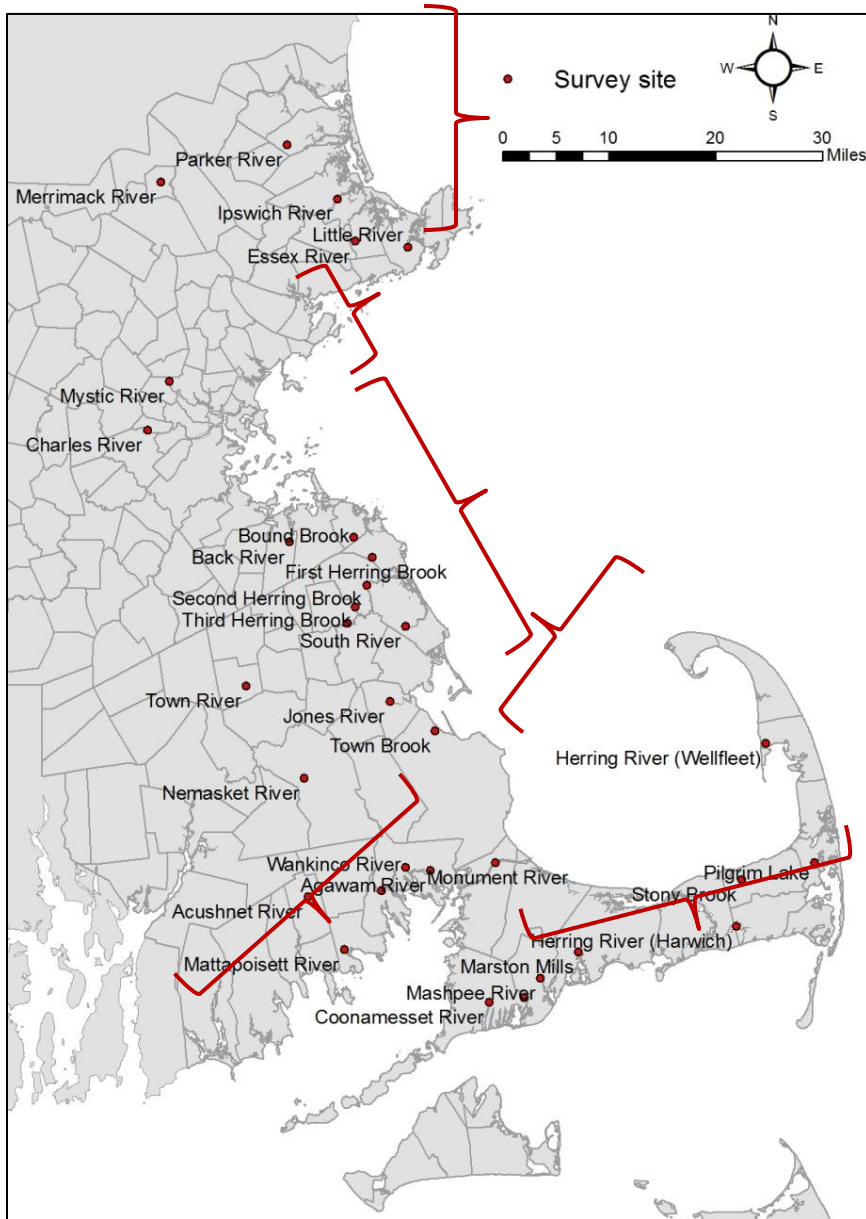
Marine Fisheries
Commonwealth of Massachusetts



Bank Building, 20 Centre Street, Middleborough, Massachusetts 02346

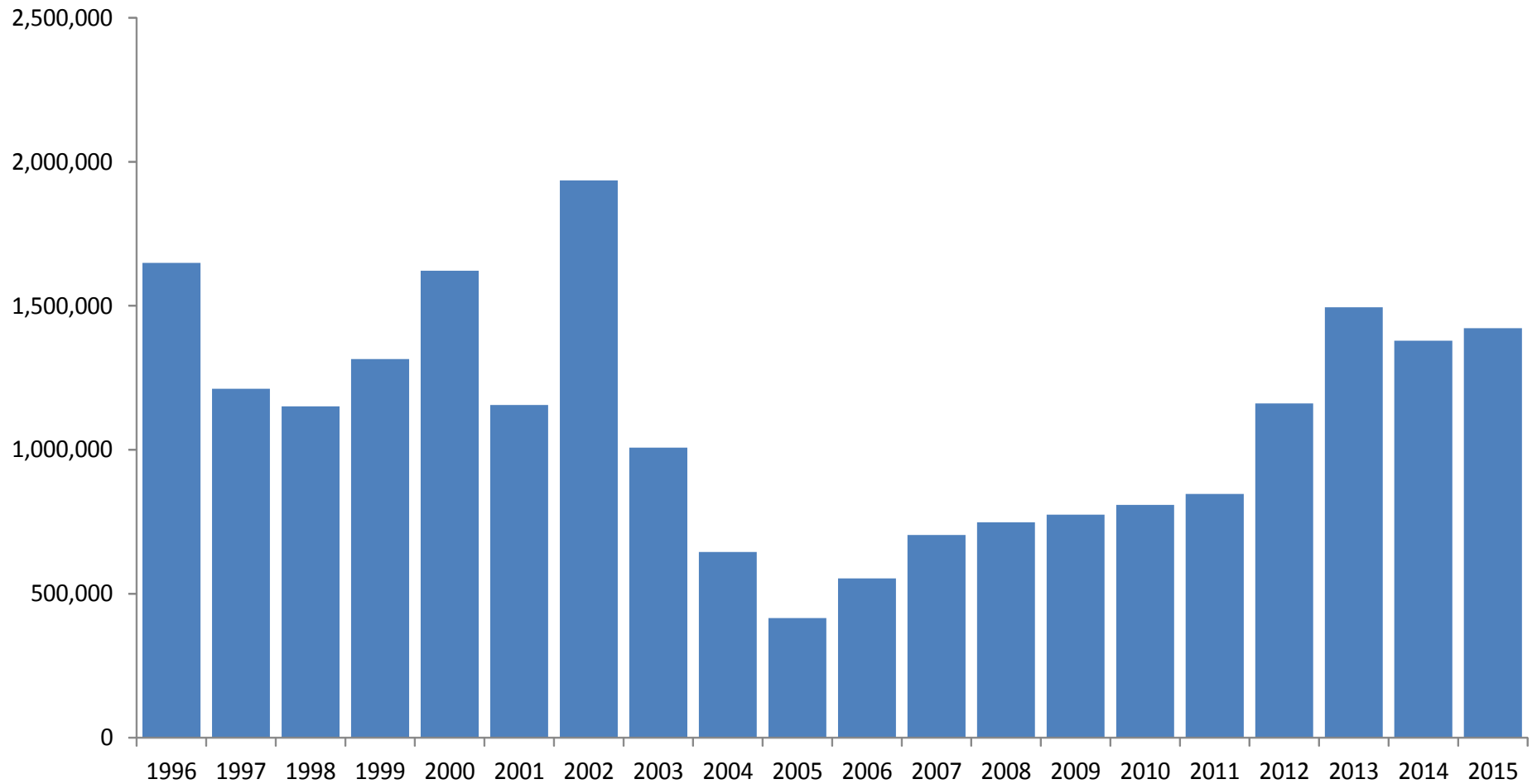
Presented to the ASMFC Shad and River Herring Board
Bar Harbor, ME, October 25, 2016

River Herring Monitoring in Massachusetts



- ~80 herring runs in MA
- 33 runs with counting
- 14 with 'census' level quality
- 8 runs with biological sampling

Massachusetts River Herring 20-year count index



Nemasket River Herring Fishery

- Historic and cultural importance
- Largest area of spawning and nursery habitat in a coastal watershed in MA
- Stewardship of Herring Fishery Commission
- Annual Herring Run Festival
- 21 year run count data series



Nemasket River Sustainable Fishery Plan

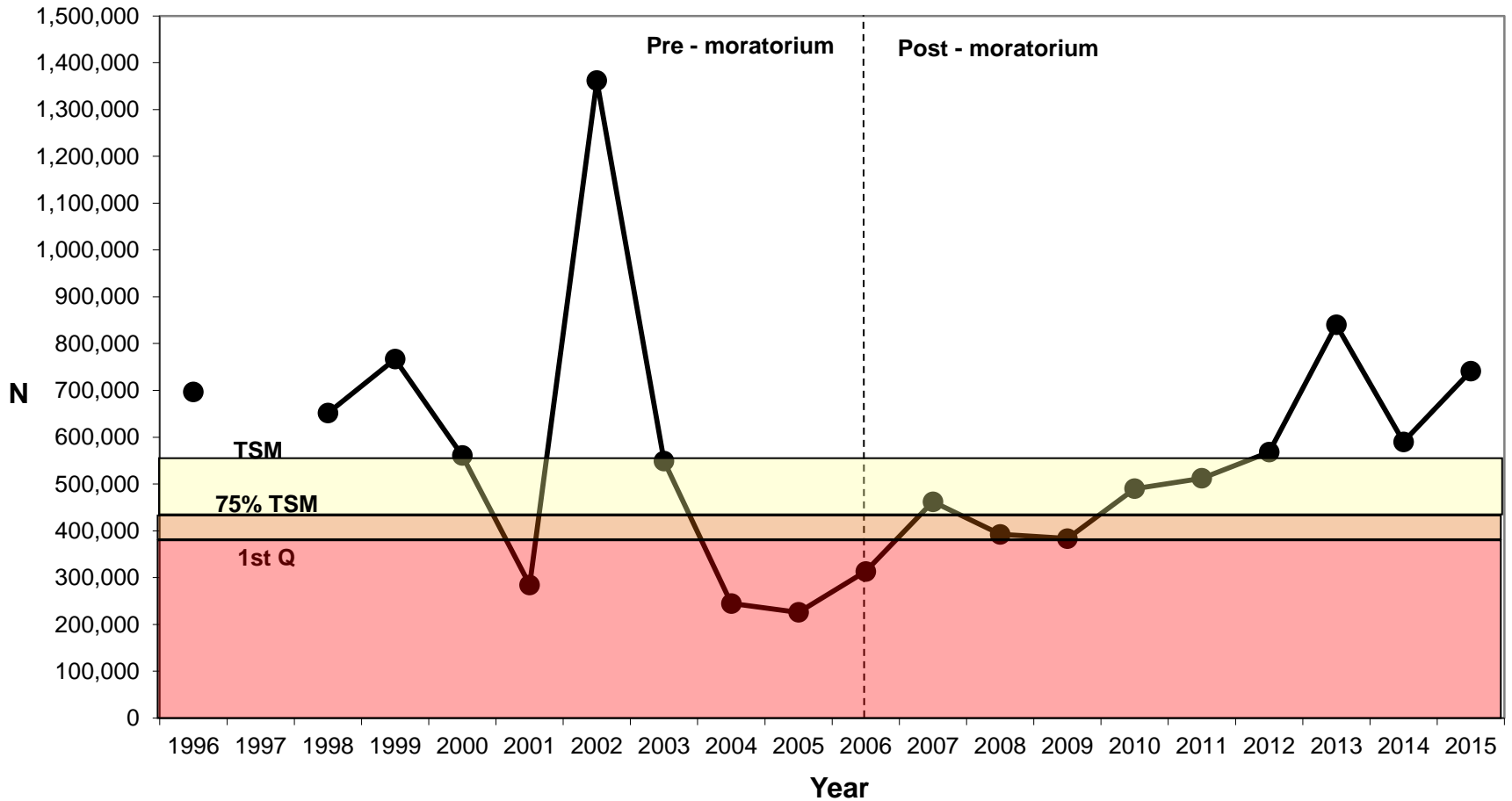
Sustainability Measure – ongoing spawning run visual count

Sustainability Target – harvest 10% of Time Series Mean (TSM)

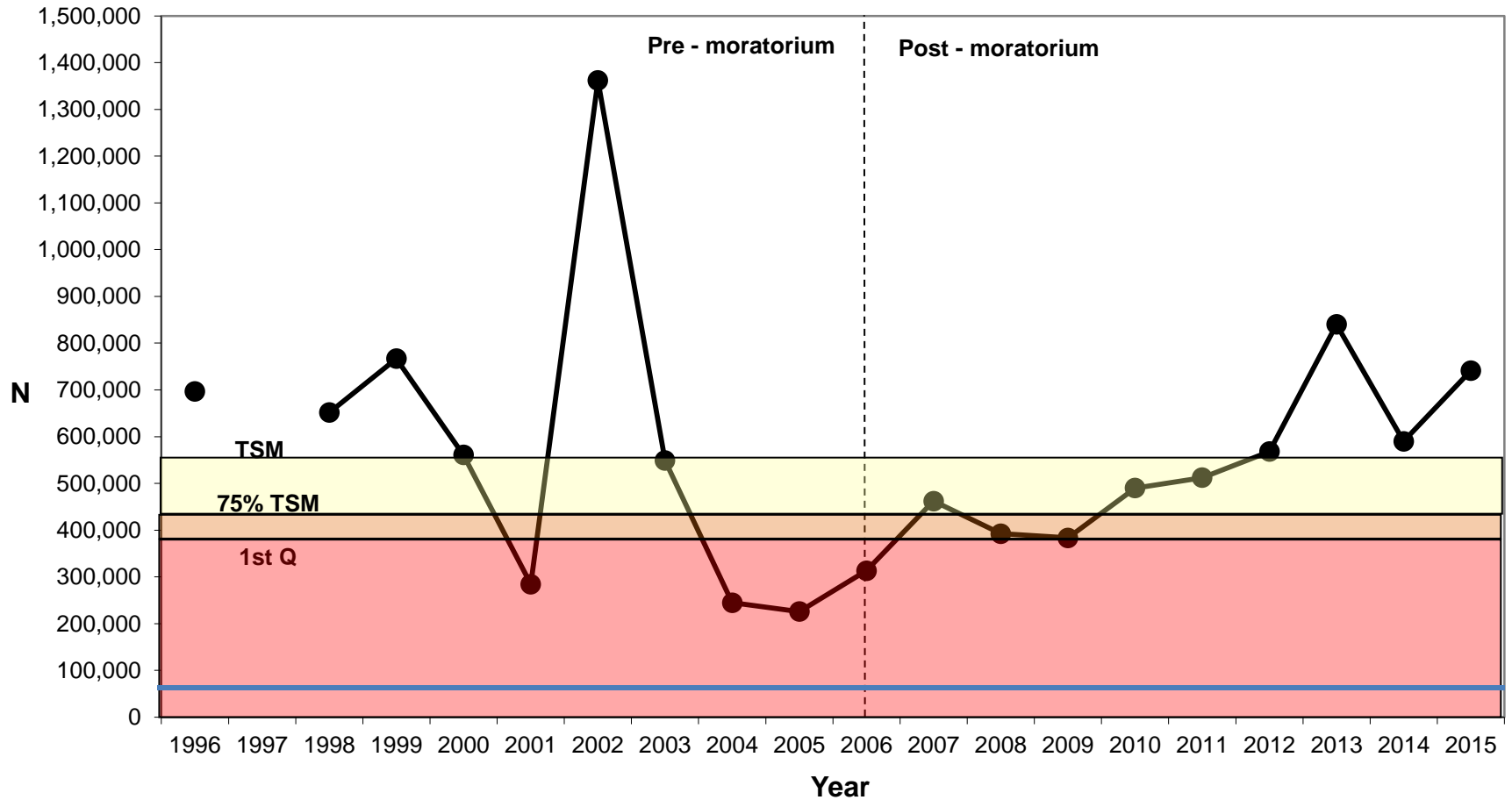
Primary Action Threshold – 25th percentile of run count time series

- Reduce harvest to 5% of TSM with 2 consecutive years below threshold
- Close fishery with 3 consecutive years below threshold

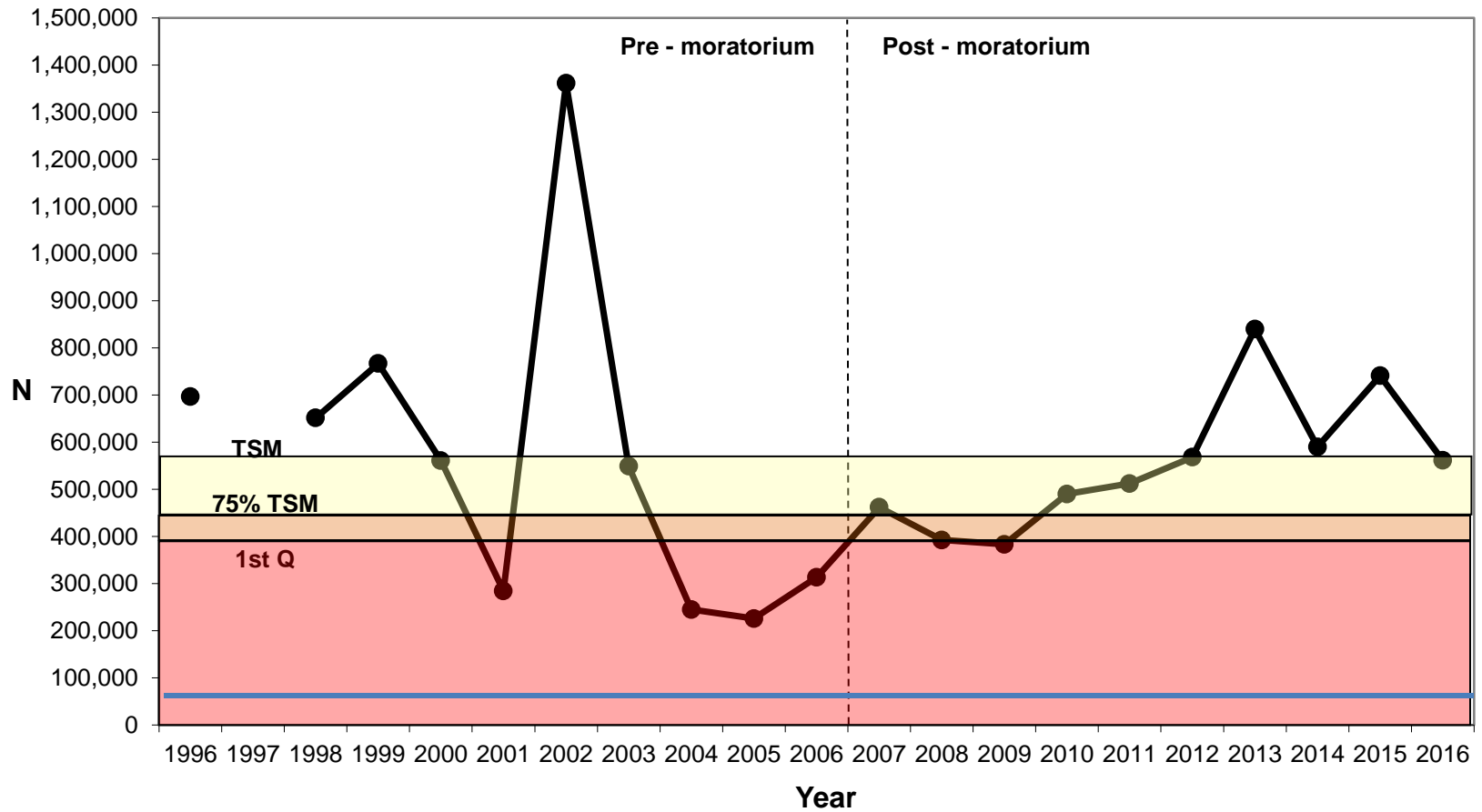
Nemasket River Herring Count: 1996-2015



Nemasket River Herring Count: 1996-2015



Nemasket River Herring Count: 1996-2016



Nemasket River Harvest Management

Pre-Ban Management: open entire run for 4 days/week, 48 fish per permit /week, unlimited resident permits and 200-300 non-resident permits

Proposed Management: (10% of TSM = 55,967 fish)

Harvest Permits - unlimited for residents of Middleborough and Lakeville and 250 non-residents

Season - 5 week season (3 open days per week)

Bag Limit - 20 fish per permit / week

Daily Catch Card - unique catch card required for possession

Expected Harvest

- Season & weekly limit/permit: $5 * 20 = 100$ fish per permit holder for the season
- Expected permits: 900 (residents & non-residents)
- Maximum harvest under this scenario= 90,000 fish
- Assumed harvest rate of 50% of maximum potential harvest = 45,000 fish
- *10% of TSM = 55,967 fish*

Technical Committee Review / Recommendation

October 2, 2016 conference call:

The reviewed SFMP offered 3 harvest management options that gave the Herring Commission a range of approaches for managing the fishery

The TC discussed the merits of the harvest options and requested a revised harvest management option that combined features of the 3 options to provide a conservative approach to avoid overharvest of the sustainability target

The TC approved the SFMP with the revised management option