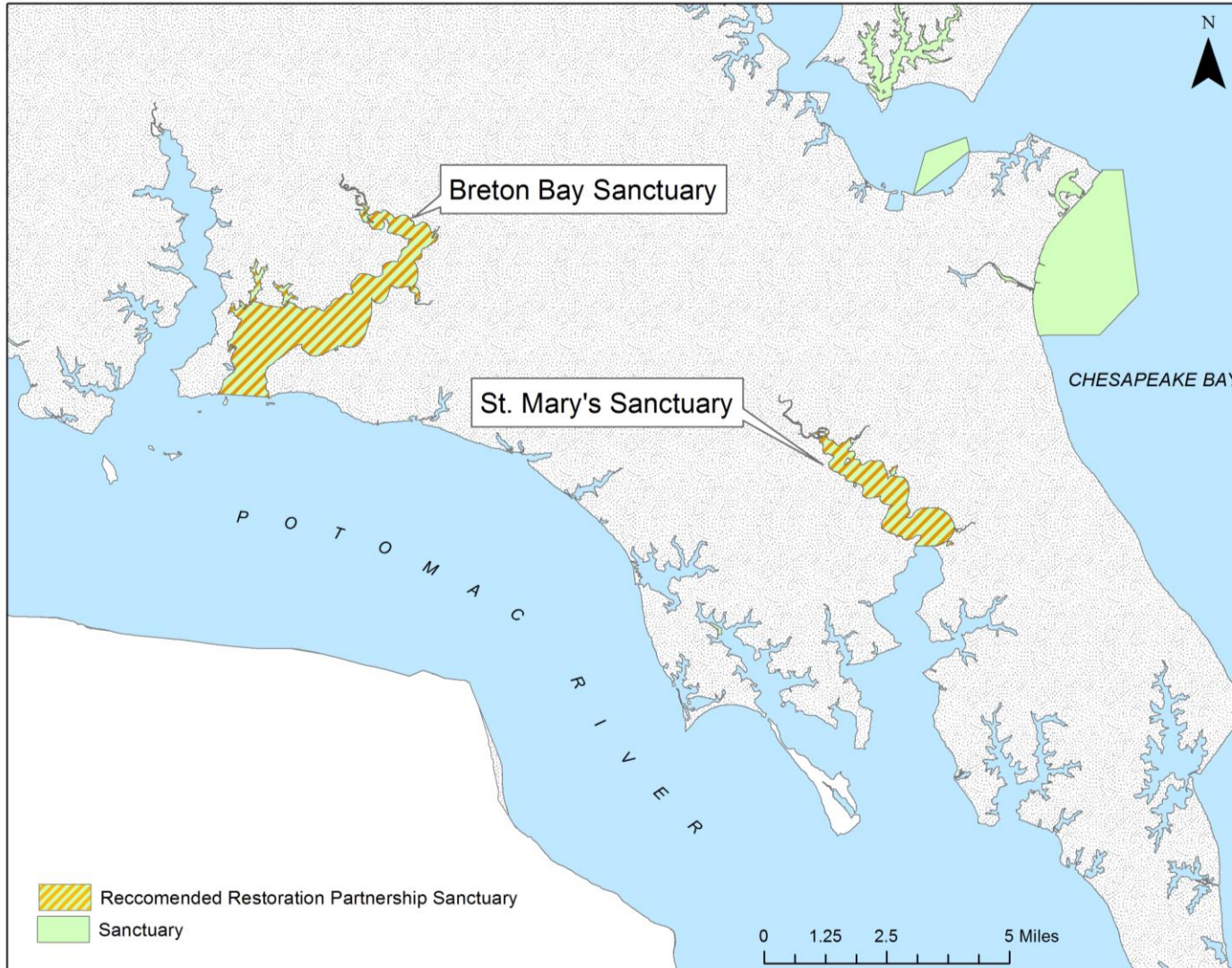




# **Recommended 4<sup>th</sup> and 5<sup>th</sup> Large Scale Restoration Sanctuaries**

# 4th and 5th Large Scale Restoration Sanctuaries





# OAC Task #2

## Oyster Advisory Commission

- July 2016- reconstituted group of 24 commissioners
- 2<sup>nd</sup> Task given to OAC:
  - Recommend to DNR the 4<sup>th</sup> and 5<sup>th</sup> large scale restoration sanctuaries towards meeting the 2014 Chesapeake Bay Watershed Agreement
  - Consider areas that could be restored with minimal expense to the taxpayer
  - Consider areas not in close proximity to the existing three restoration sanctuaries in the Choptank region



# OAC: Criteria Ranking

Oyster Advisory Commission: August 2016

Commissioners rank important criteria in selecting a restoration sanctuary area

<b>Criteria</b>	<b># Votes</b>	<b>Criteria</b>	<b># Votes</b>
Amount of Hard Bottom	17	Geographical Placement	2
Historic Spat Set	11	Current Oyster Density	2
Potential of Larval Retention	8	Other Tributary Uses	2
NEPA Approved	5	Proximity to Fished Areas	1
Enforceability	4	Depth	0
MDE Restricted Area	3	Historic Disease/Mortality	0
Salinity	2	Surrounding Landuse	0



# OAC: Homework #1

Oyster Advisory Commission: September 2016

Commissioners first “homework” assignment to vote for/against sanctuaries to become the 4<sup>th</sup> and 5<sup>th</sup> large scale restoration sanctuaries

Sanctuary	Votes For	Votes Against
MANOKIN RIVER	9	3
BRETON BAY	9	0
ST MARYS RIVER	8	5
HOOPER STRAIT	8	2
NANTICOKE RIVER	7	2
MAGOTHY RIVER	6	2
SEVERN RIVER	3	3
SOUTH RIVER	3	1

Sanctuary	Votes For	Votes Against
CHOPTANK ORA ZONE A	0	6
UPPER CHOPTANK RIVER	0	6
EASTERN BAY	0	5
LOWER PATUXENT	0	5
SANDY HILL	0	5
TILGHMAN ISLAND	0	5
COOK POINT	0	4
FORT CARROLL	0	4
LOWER CHOPTANK	0	4
OXFORD LABORATORY	0	4
HOWELL POINT	0	3
LA TRAPPE CREEK	0	3
MAN O WAR / GALES LUMP	0	3
PINEY POINT	0	3
POPLAR ISLAND	0	3
SOLOMONS CREEKS	0	3
SOMERSET	0	3



# OAC: Homework #2

Oyster Advisory Commission

May 2017

After reviewing information in the 5 Year Report, Commissioners second “homework” assignment to narrow down sanctuary choices

Sanctuary Name	Votes for				Total Votes Against
	1st Choice	2nd Choice	3rd Choice	Total Votes	
<i>Breton Bay</i>	5	7	0	12	6
Calvert Shore	0	0	0	0	1
Cedar Point	0	0	0	0	1
Hooper Strait	0	0	1	1	0
Magothy	0	1	1	2	6
Man-O-War Shoals/ Gales Lump	0	0	0	0	1
<i>Manokin</i>	8	2	1	11	10
<i>Nanticoke</i>	1	1	7	9	9
Plum Point	0	0	0	0	1
<i>Severn</i>	6	3	1	10	7
<i>South</i>	0	0	9	9	6
<i>St Mary's</i>	2	8	1	11	10



# 4<sup>th</sup> & 5<sup>th</sup> Restoration Sanctuaries

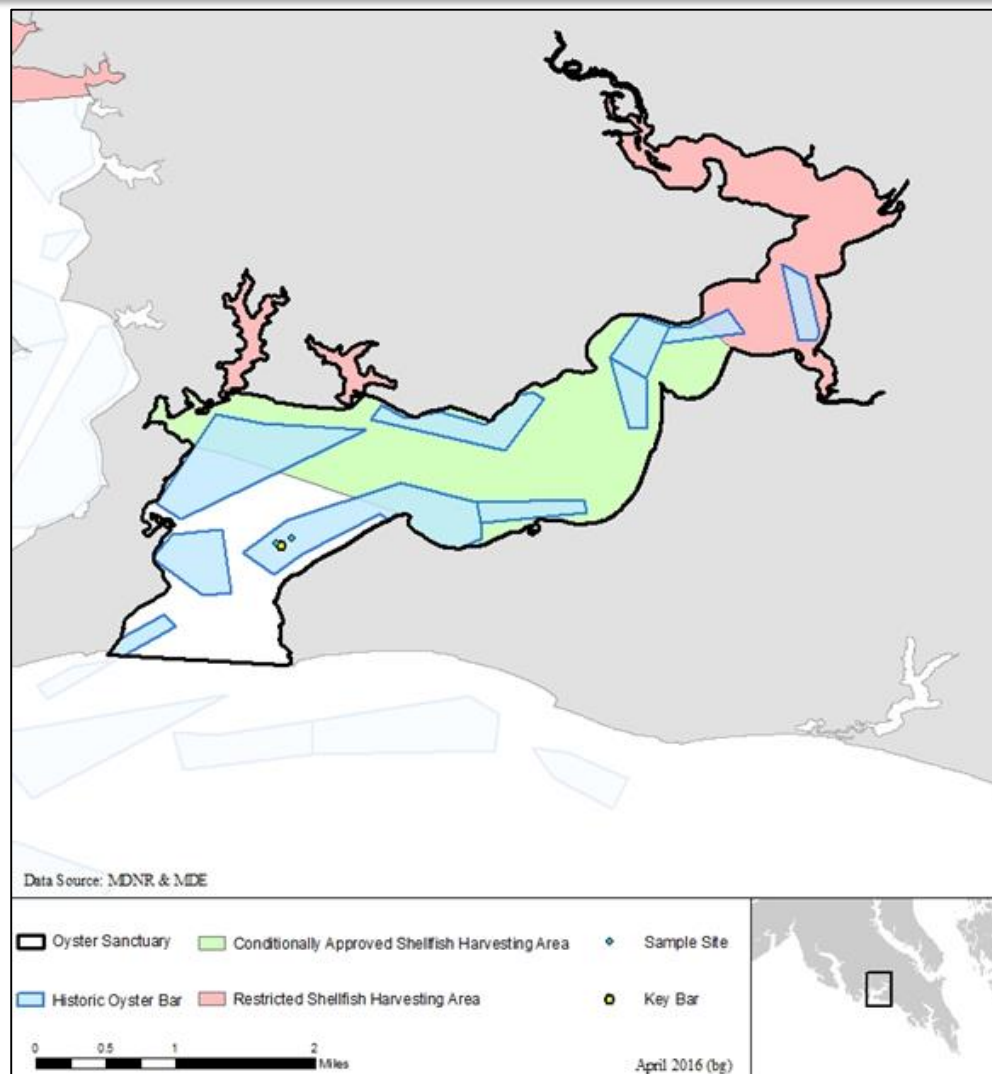
## 4<sup>th</sup> and 5<sup>th</sup> Large Scale Restoration Sanctuaries (MD DNR Press Release Dec 2017)

DNR recommended:

- Breton Bay
- Upper St Mary's River
  
- State funded restoration in St Mary's
- State and federal funded restoration in Breton Bay
- State will fund some smaller scale restoration in Severn, Manokin, and Nanticoke sanctuaries
- Develop a rotational harvest system, designating a seed study area, and renewing the state's oyster shell collection and recycling programs.

# Breton Bay Sanctuary

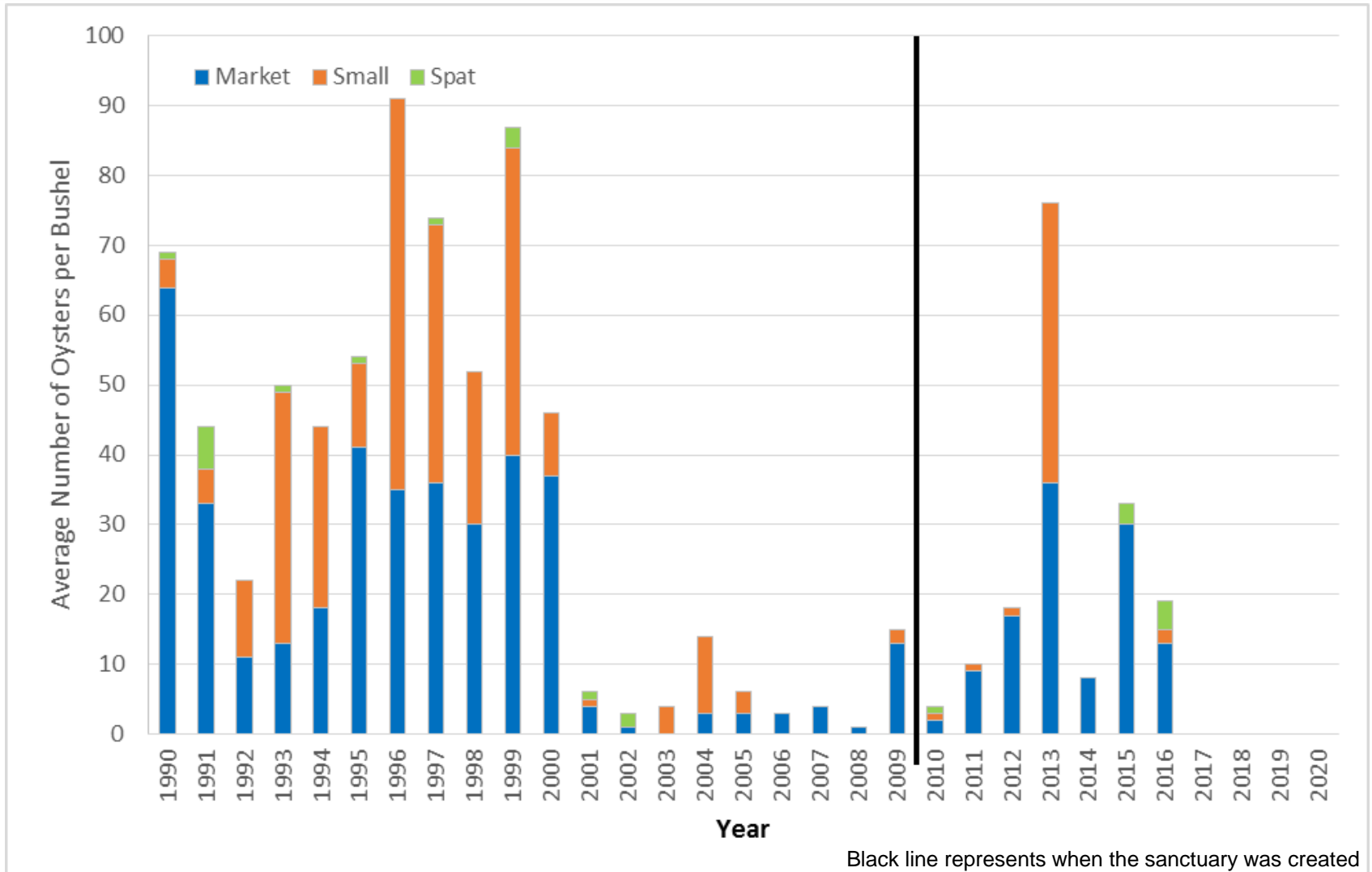
- Total acres = 3,212
- Historic charted acres = 888
- Salinity zone = Low
- Estimated Restorable Acres = 331
- Historic Spatset = Low
- Potential Larvae Retention = Unknown
- NEPA Approved = No
- Enforceability = High
- MDE Restricted = Partially
- Reproduction Potential = Low
- Average Current Oyster Density = Unknown
- Historic Mortality = Med
- Proximity to PSFA = High
- Tier = 2







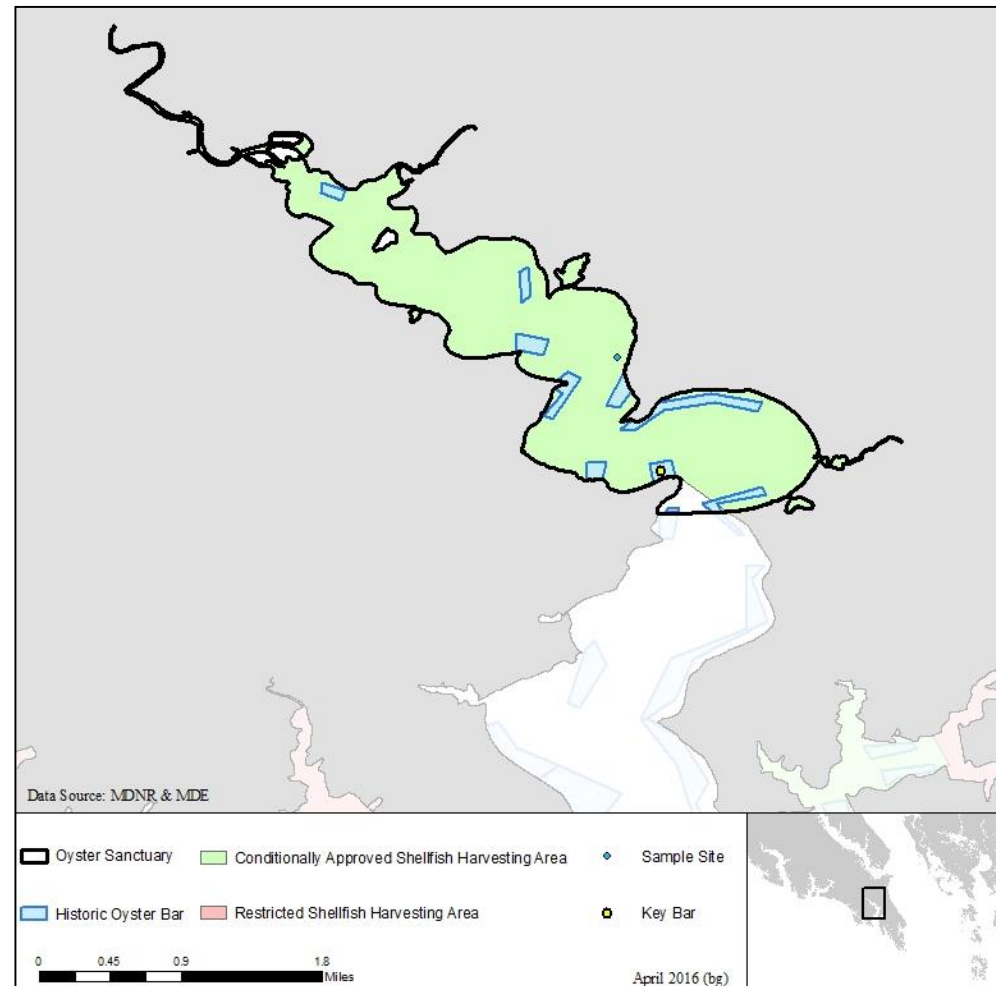
# Breton Bay Sanctuary



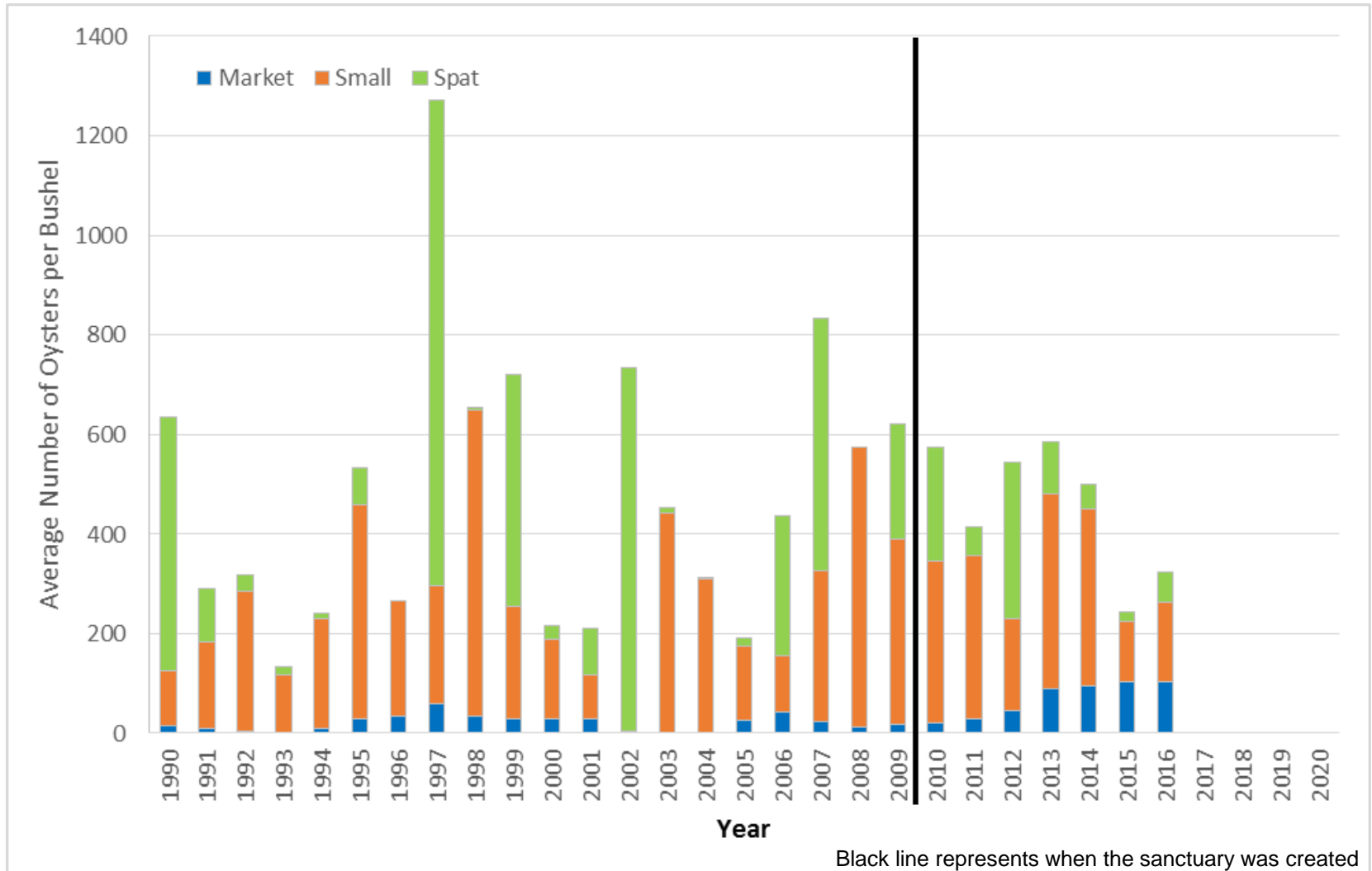
Black line represents when the sanctuary was created

# St. Mary's River Sanctuary

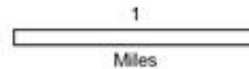
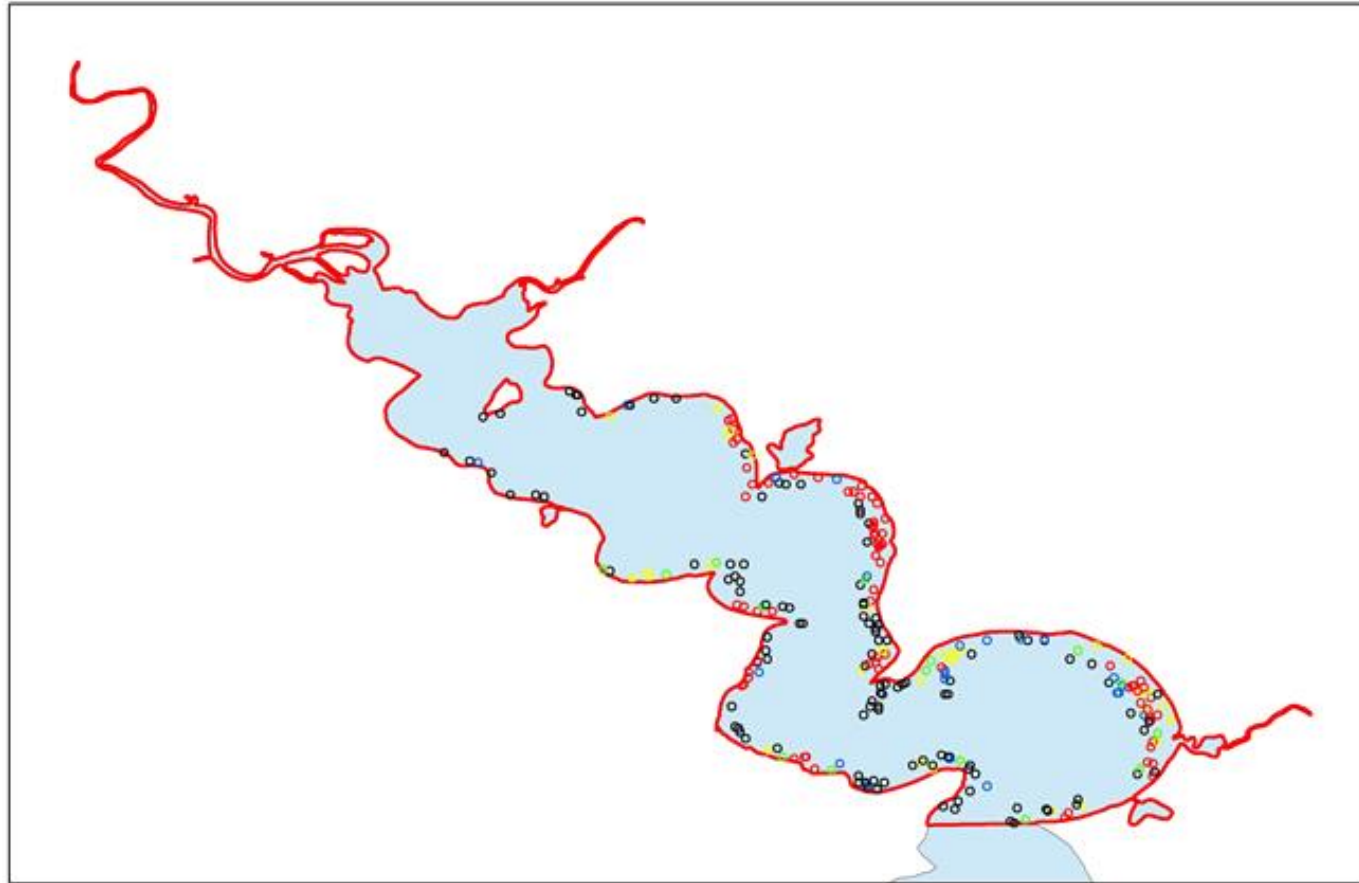
- Total acres = 1,304
- Historic charted acres = 89
- Salinity zone = Med
- Estimated Restorable Acres = 260
- Historic Spatset = High
- Potential Larvae Retention = Sink
- NEPA Approved = No
- Enforceability = High
- MDE Restricted = No
- Reproduction Potential = Med
- Average Current Oyster Density = 39.8 oysters / m<sup>2</sup> (Restoration Goal: 15 = threshold; 50 = target)
- Historic Mortality = Low
- Proximity to PSFA = High
- Tier = 1



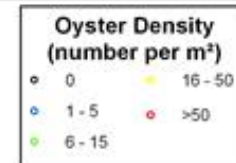
# St. Mary's River Sanctuary



# St. Mary's River Sanctuary



St. Mary's River Patent Tong Population Survey 2015





# Next Steps

- Proposed next steps are based on other large scale restoration projects in Virginia and Maryland
- Will be able to implement these steps for Breton Bay and St. Mary's sanctuaries at the same time



# Next Steps

- ✓ 1. Side scan sonar bottom survey – potential bottom suitable for restoration



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6. **Public comment period on draft blueprint**



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5. Consulting scientists review draft blueprint
6. Public comment period on draft blueprint
7. Finalize blueprint, obtain substrate planting permits (if applicable), and implementation



# NEPA

## **National Environmental Policy Act**

- Process required for environmental compliance
- All federal actions need to consider potential impacts of the proposed project to the human environment
- Results in an Environmental Assessment or Environmental Impact Statement
- For actions applying for Joint Permit, NEPA is completed as part of permitting process
  
- St. Mary's –MD DNR will do the project and apply for permit
- Breton Bay - MD DNR will partner with USACE under 704(b) Authority. USACE will prepare the NEPA documentation
  - USACE must complete review of current information to justify making Breton Bay a Tier 1 tributary under USACE Native Oyster Restoration Master Plan (Currently it is a Tier 2 tributary due to dissolved oxygen concerns. A recent review of oxygen data by the InterAgency Workgroup showed suitable conditions where oysters live. Next steps re: Tier 2/1 are being discussed)
  - Environmental Assessment process can take 18-24 months following development of Tributary Plan



# Proposed Timeline

## Summer 2018

- Data collection: Complete steps 1 through 4

## Fall/Winter 2018

- Draft blueprint

## Winter/Spring 2019

- Public comment period
- Finalize blueprint

## Spring/Summer 2019

- Implement restoration

## 2025

- Complete restoration in all 5 Maryland sanctuaries

# Questions???



Restored reef in Harris Creek