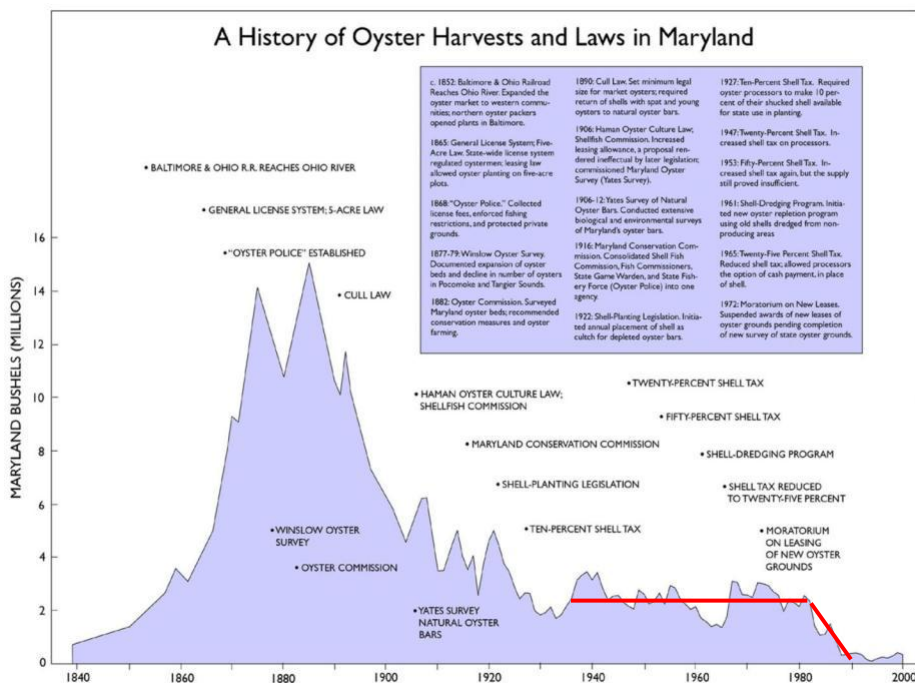
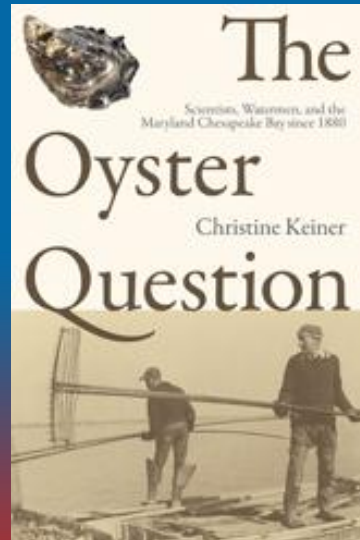


# Changes In Maryland Shellfish Aquaculture



## Science and politics

- Scientists, watermen and Maryland politics from 1880
- Documents political opposition over a century
- Social justifications used
- Politics trumped progress ... until recently



## 1992 Oyster Roundtable

- Formed by DNR Secretary
- Professionally facilitated
- Membership of widely diverse interests
- Full consensus or no agreement
- “No one gets all; all get some”
- Led to action plan that developed **Oyster Recovery Partnership**, tributary zones, **managed reserves** and other concepts





## 2003 Task Force on Seafood and Aquaculture

- Created by General Assembly
- Two sections with 40 members
  - Seafood
  - Aquaculture
- Wide membership base
- 18 month investigation
- Supported by the Maryland Aquaculture Development Conference
- Legislation submitted for 2005 legislature



## Analysis of Problems

- Lack of coordination between agencies
- Untimely delays for water column permits
- Historic dislike for private culture
- Constrained by archaic laws and regulations accumulated over years
- Lack of input to highest levels of state government on regular basis
- Previous legislation only defined roles and responsibilities of MDA, DNR, and UMD

## Aquaculture Review Board

- State agencies responsible for permitting (Agriculture, Natural Resources, Health, Environment, Board of Public Works)
- Regular meetings keep permits moving
- Pre-application meeting for applicants
- Chaired by Aquaculture Coordinator
  - Coordinate, streamline, track and ensure communications channels are open with applicant at all stages; document agency problems

## Aquaculture Coordinating Council

- 17 members
  - MDA, DNR, MDE, DHMH, DBED, NRP, UMCP, UMCES, UME, 3 TFL, 3 Industry, House, Senate
- Advisory body to the Governor and legislature
- Annual report to Governor and Environmental Committee Chairs
- Wide range of legislative charges
- Developed Best Management Practices





## Lease Law Provisions

- Changed from legislative to regulatory framework for management
- Deleted county prohibitions on leasing
- Allowed corporations to hold leases
- Allowed nonresident leasing
- Deleted acreage limitations
- Replaced with “use or lose” program with oversight monitoring and production requirements

## Key Provisions: Other

- Planting requirements
  - 1 million seed / acre on 1/4 annually
  - Waiver if unavailable or other factors
  - Requires production plan with application
- Clearance zones
  - 150' from channels, pound nets, marinas, launching ramps and PSFAs
  - 50' from shoreline except by agreement of riparian owner

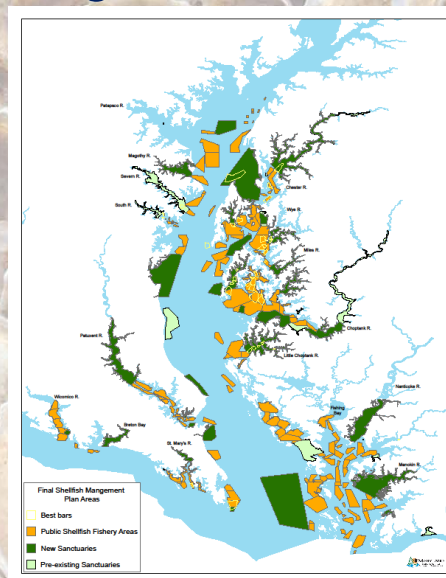


## Public Shellfish Fishery Areas

- Modified Natural Oyster Bars (NOB) to Public Shellfish Fishery Areas (PSFA) which remain reserved for public harvest
- Can be reclassified upon petition and survey weighed against defined criteria
- Determined by past 3 years harvest data and surveying to obtain quantitative information to base decision; regulatory process

## MD Shellfish Management Plan

- Expands sanctuaries but allows leasing in them
- Public Shellfish Fishery Areas for harvest
- Study areas for testing power dredging
- Expanded technology for theft prevention
- New laws and regulations targeting theft reduction





# Industry Development Support Programs



## Oyster Aquaculture Education & Training Program Project 2a

- Three-year UM Extension project
- Classroom and on-site training
- Print and electronic training material
- Oyster Hatchery Short Course
- Annual Aquaculture Conference
- Meshes with ORP Remote Setting Project
- Programs: regional workshops; gear field day; investment seminar; HACCP training; risk management seminars; marketing workshops



## Financial Support

- MARBIDCO
  - \$2.2 million between capital and disaster funds
  - Additional fund infusion in 2012
  - Low interest, non-collateralized loans
  - 3 to 4.5% interest; 40% principal forgiveness
- Natural Resources Conservation Service
  - \$1 million in EQIP grant funds
  - Bottom culture for development of habitat
  - Renovate existing substrate
  - Addition of new stabilization substrate
  - Planting seed
- UM Extension provided assistance in developing application and business plans

## Remote Setting Training

- Cooperative project with Oyster Recovery Partnership (ORP)
- Integration into training program
- Systems provided for seed production
- 30 tanks, pumps, blowers, plumbing
- 6 current systems loaned in 2 week blocks
- Growers provide cultch and labor
- Free larvae and on-site instruction

## Remote Setting Site



**Example: Deal Island Remote Setting Site at the DNR facility with tanks, pump, blower, piping and valves in place**



## 2011 Summary



- Operating Locations: 5
  - Total Participants: 16
  - Sets completed: 20
  - Total larvae used: 218 million
  - Estimated SOS produced and planted: 32 million
  - Bagged Shell Used: 9,950 Bags (4,975 bushels)
  - Loose Shell Used: 1,270 bushels
  - Crushed Shell Used: 1,800 bushels
- All watermen/growers purchased shell from the State*



## 2011

- Reorganized state government
- Centralized aquaculture permitting
- Moved positions from MDE and MDA
- Created Aquaculture Division in DNR
  - Headed by Karl Roscher
  - Five staff positions for support
- Regional General Permit 1 from USACOE
  - 50 acre bottom lease
  - 5 acre bottom cages
  - 3 acre surface float
  - 20,000 acre total

## 2012 Initiatives

- DNR authority to set water column lease application fees and annual rental rate
- DNR authority to set seed and market sizes
- Shorten & combine public notification periods
- Working to shorten permit process to 120 days
- New lease harvester permit procedures
- Access to shell for bottom stabilization and remote setting

## New Lease Applications

- Existing leases = 4,900 acres (fm ~7,000)
- 1,100 + new acres in past year
- Approving at rate of at least 2 per month
- Size 1 to 400+ acres
- 16 applications for sanctuary leases
- Program participation increasing
- Many applicants are watermen

## 42 Newest

- 23 bottom and 19 water column
- **35 Tidal Fish License holders**
  - Dorchester – 13
  - Somerset – 3
  - St. Mary's – 14
  - Talbot – 4
  - Queen Anne's – 4
  - Worcester - 1
  - Wicomico - 3



