

# ***Water Column Aquaculture***

Karl Roscher, Aquaculture Coordinator  
Maryland Department of Agriculture

## **Permitting and Licensing Requirements**



- ✓ **Industry Overview**
- ✓ **Permitting & Leasing 101**
- ✓ **Aquaculture Review Board**
- ✓ **The Leasing Process**

# Hard Clam Aquaculture





# Oyster Aquaculture Surface Floats



Choptank Oyster Company  
Dorchester County



# Oyster Aquaculture Bottom Cages

Tangier Sound Oyster Company  
Somerset County



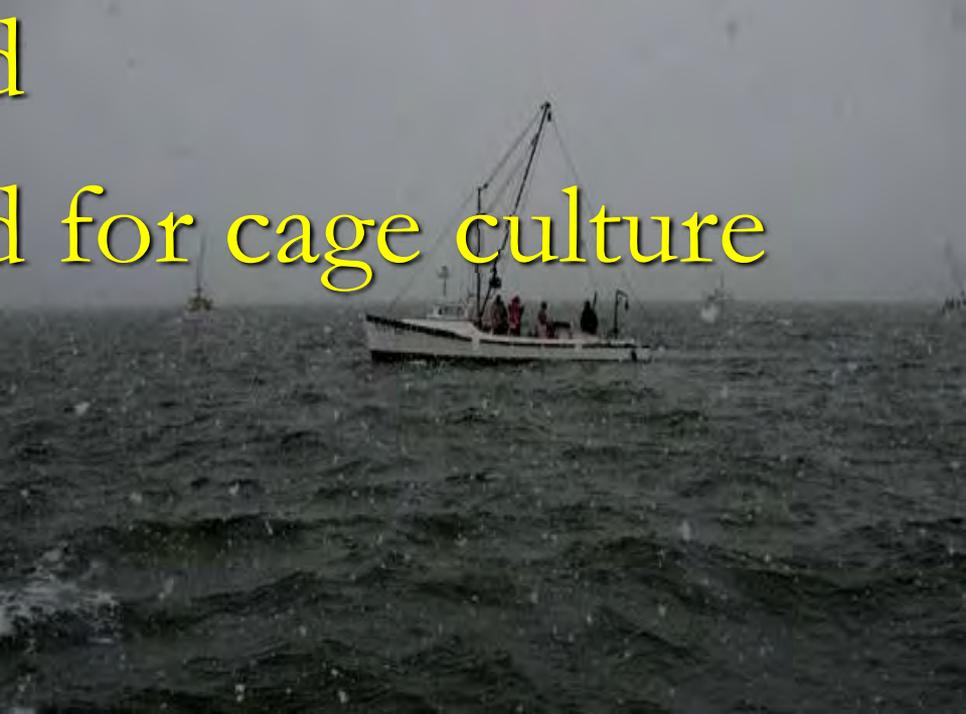
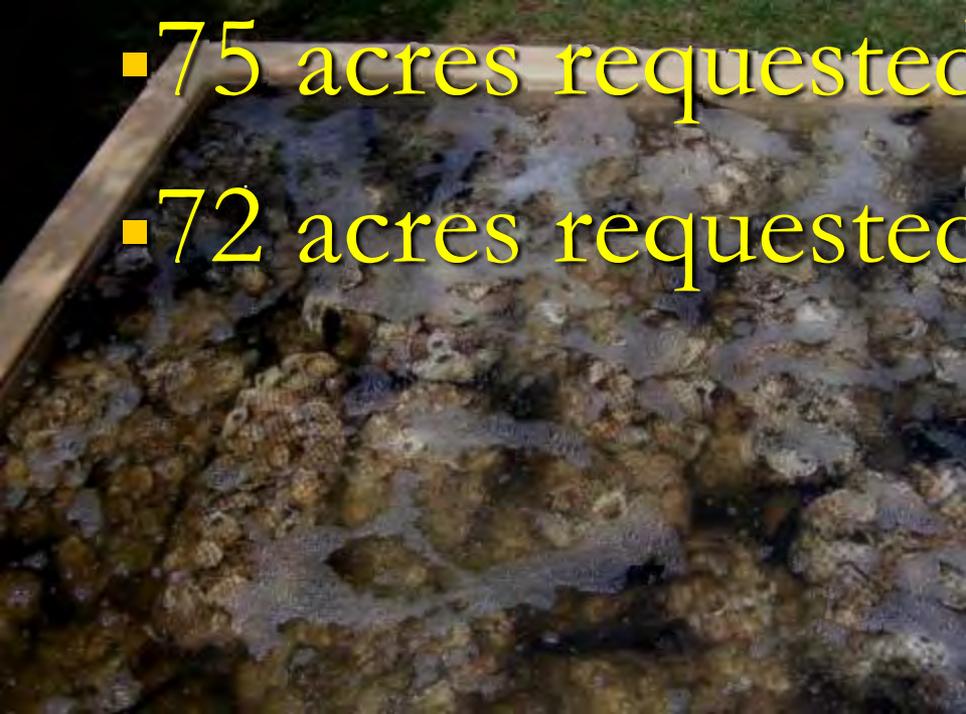
# Maryland's Off-Bottom Industry

- ❖ 12 active Water Column Leases
- ❖ Occupying 30 acres
- ❖ Utilizing surface floats and bottom cages
- ❖ Nursery and grow-out production
- ❖ Value of approximately \$2 million



# Industry Growth

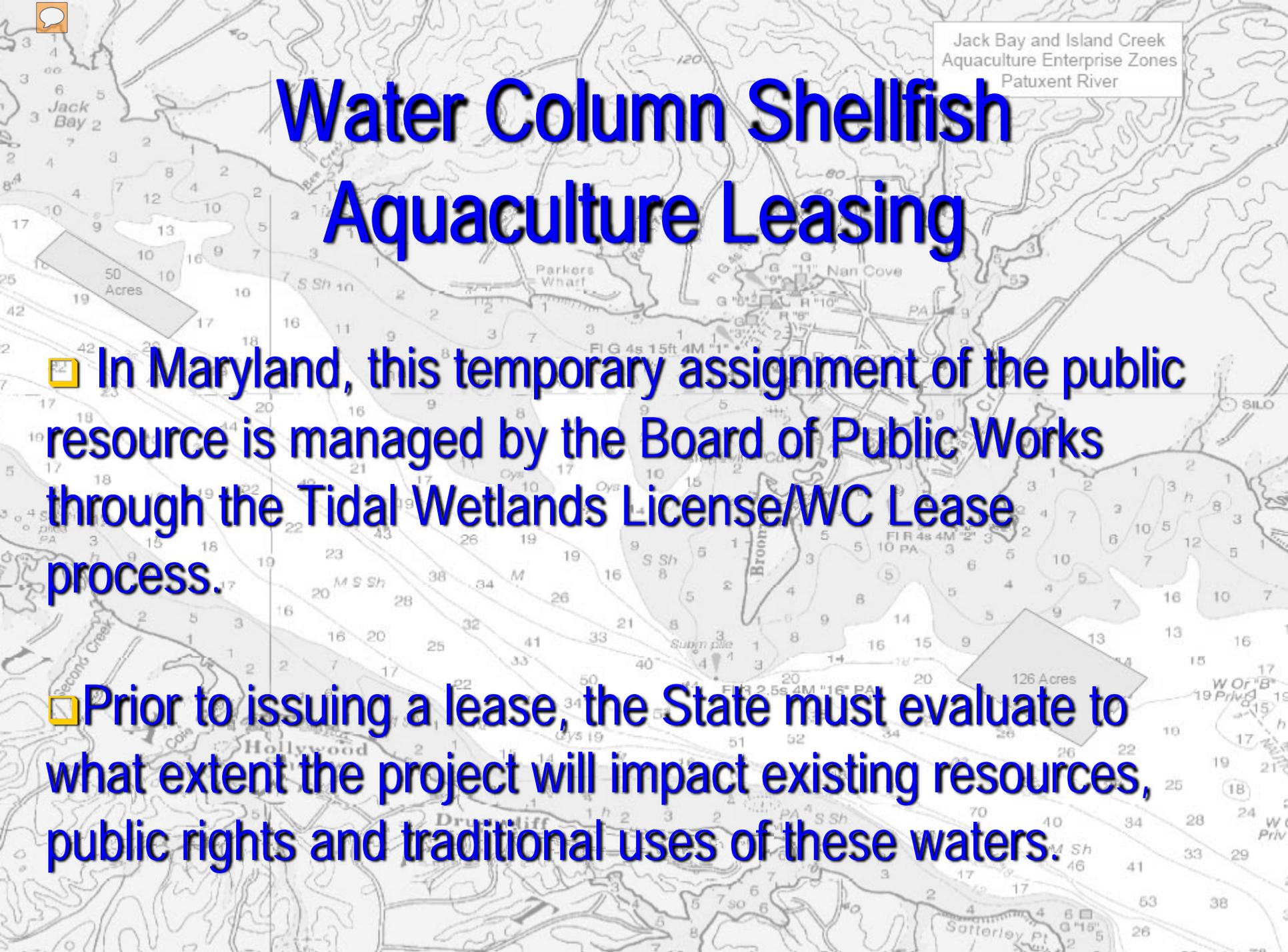
- 8 new applications under review
- 75 acres requested
- 72 acres requested for cage culture





# Shellfish Aquaculture Permitting and Leasing

- Areas where shellfish are raised commercially are resources owned by the State.
- Use of these resources is a public trust and State policy is that under certain conditions and in certain areas, shellfish aquaculture is an approved use of these resources.
- This requires the temporary assignment of a portion of the public resource for private use.

A topographic map of a coastal area, likely in Maryland, showing water depths, land features, and aquaculture zones. The map includes labels for 'Jack Bay', 'Patuxent River', 'Parker's Wharf', 'Nan Cove', 'Hollywood', and 'Satterley Pt'. A legend in the top right corner identifies 'Jack Bay and Island Creek Aquaculture Enterprise Zones' and 'Patuxent River'. Two shaded areas on the map are labeled '50 Acres' and '126 Acres'.

# Water Column Shellfish Aquaculture Leasing

❑ In Maryland, this temporary assignment of the public resource is managed by the Board of Public Works through the Tidal Wetlands License/WC Lease process.

❑ Prior to issuing a lease, the State must evaluate to what extent the project will impact existing resources, public rights and traditional uses of these waters.



# State/Federal Agency Review

- Department of Natural Resources
- Department of Environment
- US Army Corps of Engineers
- Board of Public Works

Review coordinated with Maryland Historical Trust,  
USEPA, NMFS and US fish and Wildlife Service



# Impacts Reviewed

- Disruption/loss of habitat for aquatic life
- Submerged Aquatic Vegetation
- Interference with navigation
- Conflicts with commercial fishing
- Recreational use of waterways
- Aesthetics



# Permits/Licenses/Leases

## Department of Natural Resources

Aquaculture Permit- \$0 / 5 yrs.

Shellfish Import Permit- \$0 / needed to move shellfish into State / annual

## Department of Environment/US Army Corps

Tidal Wetlands License - \$0 / 10 yrs – Issued by BPW

Joint process including USACOE Section 404 permit and Section 401 WQC

## Maryland Board Of Public Works

Water Column Lease- \$250 application fee / \$500 if hearing is requested

\$80 per acre annual lease fee

10 years



# Aquaculture Review Board

- Interagency Board that works with applicants to evaluate and process aquaculture applications.
  - Chaired by MDA-Aquaculture Coordinator
  - Environment, Health and Mental Hygiene, Natural Resources and the Board of Public Works
- Single Point of Contact for Applicants
  - Pre-application meetings
  - Streamlines the application process
  - Clearinghouse for accurate information
  - Coordinated and timely review process

# Homework

- ❖ Contact the Professionals
  - ❖ Coordinator-UM Extension-Industry
- ❖ Gather information
  - ❖ ECSCGA-Internet-Books-RAC
- ❖ Evaluate your personal goals
  - ❖ Commercial-Income-Time Investment

**Legend**

- Property Owners
- Points
- ▨ Polygons



# Homework continued

- ❖ Plan your business
  - ❖ Products-Gear
- ❖ Develop site criteria
  - ❖ Size-Location-Access-Protection
- ❖ Select potential sites
  - ❖ Water Quality-Limited Use
- ❖ Attend ARB pre-app meeting

## Legend

● Property Owners

● Points

▨ Polygons

0 500 1,000 2,000 3,000 4,000 Feet



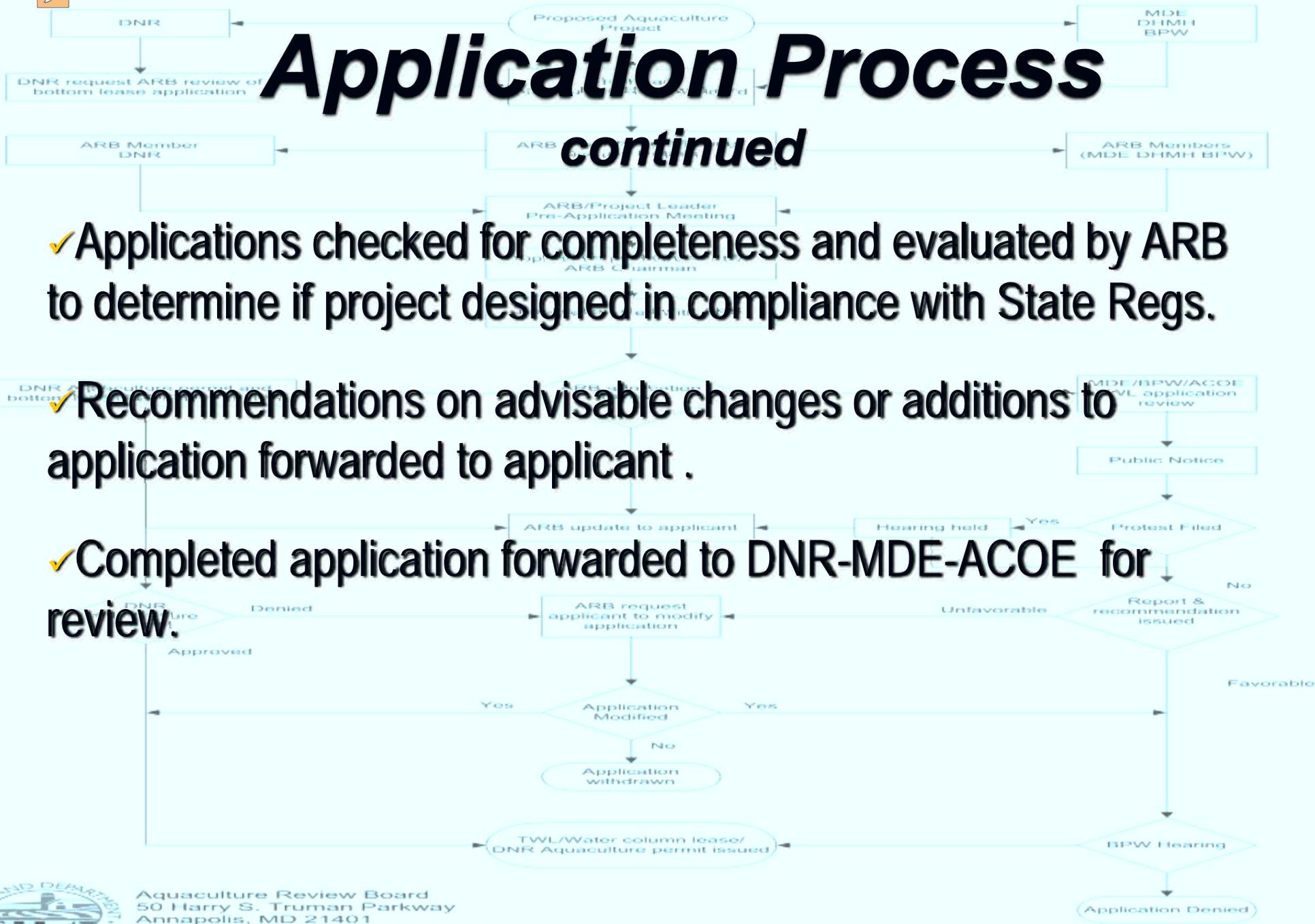
# Application Process

*continued*

✓ Applications checked for completeness and evaluated by ARB to determine if project designed in compliance with State Regs.

✓ Recommendations on advisable changes or additions to application forwarded to applicant .

✓ Completed application forwarded to DNR-MDE-ACOE for review.





# Review Process

## Patience is a virtue

- ❖ TWL application submitted to MDE/ACOE
- ❖ Project placed on public notice for 30 days (public hearing)
- ❖ Review commences with State/Federal resource agencies
- ❖ Public Hearing held if requested by third party
- ❖ Resource evaluation completed



# Review Process

**nearing the end**

- ❖ Report and recommendation issued to BPW (following WQ)
- ❖ R&R sent to interested parties if hearing was held (15 days)
- ❖ If appearance before BPW requested-21 day notice required
- ❖ Project placed on BPW agenda for a vote
- ❖ License issued
- ❖ Process can take 10 months to complete



# Conclusions

- Water Column Aquaculture is expanding.
- Requires leasing a portion of the public resource.
- Plan your business and evaluate project sites.
- ARB will help with application process.
- State/Federal Officials evaluate impacts.
- Review is a time consuming public process.
- Be patient.
- Maryland supports aquaculture development.

# Contact Information

## **Karl Roscher, Aquaculture Coordinator**

Maryland Department of Agriculture

50 Harry S. Truman Parkway

Annapolis MD 21401

Phone: 410-841-5824

Email: [RoscheK@mda.state.gov.us](mailto:RoscheK@mda.state.gov.us)