



CHESAPEAKE BAY FOUNDATION

Environmental Protection and Restoration
Environmental Education

Senate Bill 437

Aquaculture – Tidal Fisheries Advisory Commission, Oyster Advisory Commission, and Leases

Date: March 2, 2023 Position: **Support**
To: Education, Energy, & Environment Committee From: Allison Colden, Sr. Fisheries Scientist

Chesapeake Bay Foundation (CBF) **SUPPORTS** SB 437 which would address unreasonably long lease processing timelines, provide opportunities for accelerated leasing in appropriate areas, and ensure the aquaculture industry is afforded adequate representation on advisory commissions whose jurisdictions include or overlap with aquaculture.

Oyster aquaculture, the cultivation of oysters to harvest for food, is a growing industry in Maryland, supporting nearly 500 jobs¹ and more than \$8 million in economic benefits.² Moreover, shellfish aquaculture, unlike finfish aquaculture, requires no external inputs of food, nutrients, or pharmaceuticals. Because oysters are filter feeders, the addition of oysters to the Bay through aquaculture can help improve water quality and improve habitat for fish and crabs.

In 2010, the Maryland General Assembly passed significant legislative reforms to encourage the growth of Maryland's shellfish aquaculture industry. In many respects, these changes have been highly successful, with 2022 recording the largest aquaculture harvest on record at more than 92,500 bushels. However, some aspects of Maryland's regulatory processes have hamstrung the growth of the industry limiting opportunities for Marylanders to compete with a growing industry nationwide. SB 437 aims to reduce those barriers and ensure Maryland's aquaculture industry can continue to grow responsibly.

Maryland's excessively long lease processing times limit aquaculture industry competitiveness.

Of the 119 shellfish aquaculture lease applications received by DNR since January 1, 2018, 45 leases have been issued (38%), with an average lease processing time of 34.3 months. An additional 74 lease applications submitted since January 1, 2018 remain in process, with 12 lease applications still under review after more than four years (see Attachment). There are at least 2 lease applications in process in Maryland that have been pending for more than 5 years.

Maryland's lengthy lease approval timeline is not typical. A 2021 study compared the regulatory frameworks and shellfish aquaculture lease timelines across the United States. Among 19 coastal states, Maryland ranked last, with the longest average lease processing timeline, which was nearly one year longer than all other states.

Rank	State	Average Lease Issuance Time
1	New Hampshire	1.5-2 months

¹ Maryland Department of Natural Resources. Maryland Oyster Overview. Briefing to the House Environment and Transportation Committee. 31 January 2023. Slides available [online](#).

² Analysis of the Economic Benefits of the Maryland Shellfish Aquaculture Industry. 2020. Available [online](#).

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2	Georgia	2-3 months
3	Louisiana	3.5-4.5 months
4	New Jersey	6 months
5	Texas	6 months
6	Massachusetts	6-7 months
7	Alabama	6-8 months
8	Oregon	3-9 months
9	Rhode Island	8-9 months
10	Virginia	3-12 months
11	Mississippi	5-12 months
12	Florida	6-12 months
13	Washington	6-12 months
14	New York	9-12 months
15	Alaska	10-12 months
16	North Carolina	12 months
17	Connecticut	4-24 months
18	Maine	12-24 months
19	Maryland*	34 months
Source: NOAA Fisheries 2021 State by State Summary of Shellfish Aquaculture Leasing/Permitting Requirements. Available online .		
*Maryland reported a typical lease timeline of 8-12 months in the NOAA report, but DNR data from 2018-2023 indicates the average timeline is 34 months. Only 2 leases since 2018 have been issued in less than 12 months. See Attachment for full DNR data summary.		

Beyond inconvenience, these lengthy delays threaten the viability of new shellfish aquaculture businesses. Due to the nature of aquaculture, new businesses will not generate a profit until 3-4 years after a lease is issued due to the time it takes oysters to grow to market size. Delays associated the lease application process further delays the point at which the business turns a profit. Maryland’s timing is also highly variable, with lease processing times varying from 11 months to 47 months, increasing risk and uncertainty associated with starting an aquaculture business in Maryland.

SB 437 would address these lengthy lease processing times by requiring that DNR issue a lease within 180 days following the required public comment period or the dismissal of a protest. This provides growers with additional certainty and peace of mind that after meeting all necessary regulatory requirements, the lease will be issued within six months.

Additionally, SB 437 requires DNR to work with other relevant state agencies to identify and pre-approve areas of submerged land adjacent to state-owned property that could support shellfish aquaculture. These areas would be pre-approved only if environmental conditions could support shellfish survival and growth and if aquaculture activities would be compatible with existing uses of the site. These pre-approved areas would allow for a streamlined permitting process for those growers interested in utilizing these sites to establish new leases.

The breadth of the Maryland aquaculture industry is not currently reflected in regulatory discussions. In 2012, Maryland’s aquaculture industry harvested less than 5,000 bushels of oysters. In 2022, that harvest grew to over 92,000 bushels. Despite the rapid growth of the aquaculture industry, oyster growers are still

allocated only one seat on the Tidal Fisheries Advisory Commission and the Oyster Advisory Commission, two key DNR advisory boards whose jurisdictions overlap with the aquaculture industry.

SB 437 would expand aquaculture representation on these boards with the addition of two industry members appointed to the Tidal Fisheries Advisory Commission and the Oyster Advisory Commission. This provides the aquaculture industry a greater opportunity to discuss areas of potential overlap and to head off conflicts with other stakeholders in Maryland's seafood industry. It also ensures the full breadth of the industry is represented, as aquaculture can take many forms (on-bottom, bottom cages, floating cages, etc.), and concerns are not homogenous across the industry.

Oyster aquaculture provides Maryland an unparalleled opportunity help recover the oyster population while supporting working waterfronts and maintaining a critical cultural connection to the Chesapeake Bay. SB 437 will help ensure that this nascent industry has the chance to grow responsibly to help achieve those goals.

CBF urges the Committee's FAVORABLE report on SB 437.

For more information, please contact Matt Stegman, Maryland Staff Attorney, at mstegman@cbf.org.

ATTACHMENT

Summary of Maryland Shellfish Lease Applications (January 1, 2018 – January 13, 2023)ⁱ

Waterbody	County	Acreage	Received	Status	Issued Date	Time to Issuance (months)	Time in Review (months)
Leadenham Creek	Talbot	15.3	1/26/2018	In process	---	---	61
Wicomico River	St Mary's	10.2	1/26/2018	In process	---	---	61
Carthagena Creek	St. Mary's	14.6	4/3/2018	In process	---	---	58
Calvert Bay	St. Mary's	29.7	4/3/2018	In process	---	---	58
Nanticoke River	Dorchester	7.9	4/3/2018	In process	---	---	58
Eastern Bay	Queen Anne's	25.9	4/6/2018	In process	---	---	58
Fishing Bay	Dorchester	14.7	4/11/2018	In process	---	---	58
Wicomico River	Somerset	30.4	4/11/2018	In process	---	---	58
Wicomico River	Charles	22.3	7/17/2018	In process	---	---	55
Wicomico River	Charles	10	12/7/2018	In process	---	---	50
Chincoteague Bay	Worcester	38.3	2/13/2019	In process	---	---	48
Smith Creek	St. Mary's	7.3	2/25/2019	In process	---	---	48
Smith Creek	St. Mary's	5.5	3/4/2019	In process	---	---	47
Chesapeake Bay	St. Mary's	13.3	3/13/2019	In process	---	---	47
Tangier Sound	Dorchester	55	3/18/2019	In process	---	---	47
Choptank River	Dorchester	2.4	3/22/2019	In process	---	---	47
Chesapeake Bay	Calvert	7.4	3/22/2019	In process	---	---	47
Chesapeake Bay	Calvert	7.5	4/1/2019	In process	---	---	47
Choptank River	Dorchester	10	5/16/2019	In process	---	---	45
Harris Creek	Talbot	3.8	5/29/2019	In process	---	---	45
Chester River	Queen Anne's	5.7	5/31/2019	In process	---	---	45
Madison Bay	Dorchester	50	7/29/2019	In process	---	---	43
Choptank River	Dorchester	27.1	8/12/2019	In process	---	---	42
Little Choptank River	Dorchester	40	8/22/2019	In process	---	---	42
Harris Creek	Talbot	4.9	9/5/2019	In process	---	---	41
Madison Bay	Dorchester	70.4	9/11/2019	In process	---	---	41
Monie Bay	Somerset	7.2	10/18/2019	In process	---	---	40
Smith Creek	St. Mary's	5.4	11/13/2019	In process	---	---	39
Smith Creek	St. Mary's	2.4	12/4/2019	In process	---	---	38
Little Choptank River	Dorchester	32	2/28/2020	In process	---	---	36
Crab Alley Bay	Queen Anne's	1.6	3/3/2020	In process	---	---	35
Cummings Creek	Talbot	7.6	4/13/2020	In process	---	---	34
Smith Creek	St Mary's	12.6	4/13/2020	In process	---	---	34
LeCompte Bay	Dorchester	51.2	4/13/2020	In process	---	---	34
Farm Creek	Dorchester	8.5	4/16/2020	In process	---	---	34
Fishing Creek	Dorchester	10	5/4/2020	In process	---	---	33
Fishing Bay	Dorchester		5/22/2020	In process	---	---	33
Tar Bay	Dorchester	46.1	6/12/2020	In process	---	---	32
Farm Creek	Dorchester	0.2	7/2/2020	In process	---	---	32
Farm Creek	Dorchester	9	7/2/2020	In process	---	---	32

Hellen Creek	Calvert	7	7/28/2020	In process	---	---	31
Wicomico River	St Mary's	13.7	8/9/2020	In process	---	---	30
Harris Creek	Talbot	9	8/9/2020	In process	---	---	30
Chesapeake Bay	St. Mary's	41.6	11/1/2020	In process	---	---	28
St. Jerome Creek	St. Mary's	26	11/1/2020	In process	---	---	28
St. Jerome Creek	St. Mary's	6	4/9/2021	In process	---	---	22
Cummings Creek	Talbot	2.5	6/28/2021	In process	---	---	20
St. Marys River	St. Mary's	8.4	7/15/2021	In process	---	---	19
Johnson Bay	Worcester	5.1	8/10/2021	In process	---	---	18
Dukehart Channel	St Mary's	103.2	8/16/2021	In process	---	---	18
St. George Creek	St. Mary's	0.1	8/16/2021	In process	---	---	18
Miles River	Talbot	25.1	10/21/2021	In process	---	---	16
Chesapeake Bay	Calvert	5	10/21/2021	In process	---	---	16
Chesapeake Bay	Calvert	18.4	10/28/2021	In process	---	---	16
Parker Bay	Worcester	2	11/1/2021	In process	---	---	16
St. George Creek	St. Mary's	5.8	11/29/2021	In process	---	---	15
Little Annemessex River	Somerset	1.3	11/29/2021	In process	---	---	15
Manokin River	Somerset	28.3	2/22/2022	In process	---	---	12
Manokin River	Somerset	6.2	4/8/2022	In process	---	---	10
Choptank River	Dorchester	12.4	5/3/2022	In process	---	---	9
St. Marys River	St. Mary's	19.8	5/5/2022	In process	---	---	9
Tred Avon River	Talbot	14.6	5/11/2022	In process	---	---	9
Tred Avon River	Talbot	2.4	5/20/2022	In process	---	---	9
Tred Avon River	Talbot	1	6/20/2022	In process	---	---	8
Lecompte Bay	Dorchester	22	6/20/2022	In process	---	---	8
Tred Avon River	Talbot	10.7	6/21/2022	In process	---	---	8
Tred Avon River	Talbot	14.6	6/24/2022	In process	---	---	8
Calvert Bay	St. Mary's	29.8	8/3/2022	In process	---	---	6
St. George Creek	St. Mary's	18.9	8/17/2022	In process	---	---	6
Goldsborough Creek	Talbot	9.4	10/4/2022	In process	---	---	4
Chesapeake Bay	Calvert	12.3	11/21/2022	In process	---	---	3
Tar Bay	Dorchester	39.8	12/19/2022	In process	---	---	2
Monie Bay	Somerset	9.5	12/19/2022	In process	---	---	2
Patuxent River	Calvert	2.7	12/19/2022	In process	---	---	2
Fishing Bay	Dorchester	4.7	4/3/2018	Issued	3/18/2022	47	---
Wicomico River	St. Mary's	16.4	6/25/2018	Issued	6/3/2022	47	---
Chesapeake Bay	Anne Arundel	1.7	9/26/2018	Issued	9/16/2022	47	---
Harris Creek	Talbot	4.9	4/16/2019	Issued	1/4/2023	44	---
Patuxent River	St. Mary's	34.3	5/28/2019	Issued	1/4/2023	43	---
Patuxent River	St Mary's	26.9	4/1/2019	Issued	9/16/2022	41	---
Patuxent River	Charles	10.5	4/1/2019	Issued	9/16/2022	41	---
Wicomico River	St. Mary's	12.5	4/22/2019	Issued	10/17/2022	41	---
Patuxent River	Calvert	12.7	4/3/2019	Issued	7/13/2022	39	---
Wicomico River	Somerset	60.3	4/11/2019	Issued	7/14/2022	39	---
Trippe Creek	Talbot	6.1	4/11/2019	Issued	7/14/2022	39	---

Fishing Bay	Dorchester	39.6	11/20/2018	Issued	2/3/2022	38	---
South River	Anne Arundel	0.4	9/3/2019	Issued	11/18/2022	38	---
Harris Creek	Talbot	1.8	9/5/2019	Issued	10/18/2022	37	---
Little Choptank River	Dorchester	8.8	3/12/2019	Issued	3/18/2022	36	---
Manokin River	Somerset	19.2	2/5/2019	Issued	2/3/2022	35	---
Patuxent River	St. Mary's	22.9	5/3/2019	Issued	4/21/2022	35	---
Trippe Creek	Talbot	8.4	11/8/2019	Issued	10/17/2022	35	---
Choptank River	Dorchester	5	9/19/2019	Issued	7/13/2022	33	---
Chesapeake Bay	Anne Arundel	0.8	2/12/2020	Issued	11/18/2022	33	---
Harris Creek	Talbot	4.7	2/27/2018	Issued	11/23/2020	32	---
Herring Creek	St. Mary's	2.5	5/18/2018	Issued	10/29/2020	29	---
Carthagen Creek	St. Mary's	2.4	3/2/2018	Issued	5/18/2020	26	---
Little Choptank River	Dorchester	16.3	5/4/2018	Issued	7/7/2020	26	---
Manokin River	Somerset	4.8	1/16/2018	Issued	2/25/2020	25	---
Caulk Creek	Talbot	1.7	10/11/2018	Issued	8/24/2020	22	---
St. Marys River	St Mary's	1	10/18/2018	Issued	8/24/2020	22	---
Patuxent River	St. Mary's	2.8	1/26/2018	Issued	11/4/2019	21	---
Manokin River	Somerset	10.1	1/26/2018	Issued	10/9/2019	20	---
Nanticoke River	Wicomico	30.1	1/26/2018	Issued	10/9/2019	20	---
Chesapeake Bay	Calvert	27.3	1/26/2018	Issued	10/9/2019	20	---
Carthagen Creek	St. Mary's	2.3	2/28/2018	Issued	11/4/2019	20	---
Carthagen Creek	St Mary's	1.6	3/22/2018	Issued	12/17/2019	20	---
Harris Creek	Talbot	1.6	6/4/2019	Issued	12/23/2020	18	---
Chesapeake Bay	Talbot	50.2	5/10/2018	Issued	11/4/2019	17	---
Shipping Creek	Queen Anne's	0.2	11/28/2018	Issued	5/18/2020	17	---
Purnell Bay	Worcester	1.9	11/28/2018	Issued	5/18/2020	17	---
Tred Avon River	Talbot	8.2	6/22/2018	Issued	11/4/2019	16	---
Carthagen Creek	St Mary's	4	3/19/2018	Issued	7/10/2019	15	---
Patuxent River	Calvert	5	8/2/2018	Issued	11/4/2019	15	---
Fishing Bay	Dorchester	19.1	7/30/2018	Issued	10/9/2019	14	---
Eastern Bay	Talbot	5	6/5/2018	Issued	7/10/2019	13	---
Wicomico River	Somerset	4.8	2/22/2018	Issued	2/27/2019	12	---
Patuxent River	Calvert	1.7	9/21/2018	Issued	8/28/2019	11	---
Chester River	Queen Anne's	5.3	1/10/2019	Issued	12/17/2019	11	---

ⁱ Maryland Department of Natural Resources. Presentation to the Maryland Aquaculture Coordinating Council. January 19, 2023. Available [online](#).