Credit Generation for Oyster Aquaculture

If there are questions about our Water Quality Trading (WQT) Program not addressed in this or the additional FAQ documents provided by the department, please let us know by filling out our feedback form. Click HERE!

Disclaimer: Please be sure to read the Water Quality Trading (WQT) Program Guidance prior to reading sector specific guidance!

Glossary of Key Terms for the Oyster Aquaculture FAQ
The following terms are helpful to understand when using this document. If there is a term or definition missing that you would like added, please use the Feedback Form.

- **Small credit**: The basic, or default, credit requires that oysters harvested and sold should be an oyster class size minimum of 2”.

- **Medium credit**: Medium credit requires that oysters harvested and sold should be an oyster class size between 2.5” - 3.49”

- **Large credits**: Enhanced credit requires that oysters harvested and sold should be an oyster class size above 3.5”

- **Reserve Ratio**: Five percent of each credit will be used by the MDE to create a reserve pool that can be used to buffer credit losses elsewhere, or be retired as water quality improvement.

Frequently Asked Questions about Oyster Aquaculture Credits:

**Which aquaculture growers can participate in this program?**
- Any oyster aquaculture grower with a valid lease can participate if they operate:
  - Off-Bottom using hatchery-produced spat
  - On-Bottom using hatchery-produced spat
  - On-Bottom using substrate addition

**When can I start generating credits?**
- A grower can generate credits upon harvesting oysters.

**What is the baseline?**
- For oyster aquaculture there are no minimum pollutant reduction goals, therefore all animals harvested that meet trading requirements are eligible for generating credits.

**What are the minimum qualifying conditions for generating credits?**
- Oysters in the final grow out location must be grown from less than 2 inch shell height.
- To generate credits, harvested oysters must then be larger than 2.0 inches in shell height.
- Oysters have to be alive when removed.
- Credits certified in nitrogen and phosphorus loads of 1 pound or greater.

How can my operation begin generating credits?
1. Grower will harvest oysters and document harvest amount and sizes.
2. Grower/aggregator will supply the following information to MDE:
   a. [Credit application form](#) and [Verification materials](#)
   b. Harvest sheets for all credits in the application & credits generated. MDE has created a tool to help determine credits generated.
   c. Use the [Mapping tool for your Segmentshed](#)

MDE will review and approve within two weeks
Credits will be published by MDE onto the public [WQT Registry](#) and available for sale

Figure 1. How to get aquaculture oyster credits on the market

What is the minimum oyster size that will provide credits?
- The oyster size for the Small credit is 2.0-2.49 inches.

Can I sell credits on my own? Or do I need an aggregator?
- Any grower can sell credits individually or through an aggregator. The decision is at the discretion of the grower.

How does the State ensure that credits are verified?
- MD DNR will provide periodic assessments of growers that participate in the trading program during lease inspections. See Credit Verification below.
When can credits be certified and trades registered?
- You can choose to certify credits quarterly or all together at the end of the year, whichever is more convenient for you. Credits can be traded once certified, however the certified credits can only be used to meet permit requirements from the same year they were generated.

Example credit generation and trade timeline:

How are the nutrient credit calculated?
- The credits are calculated based on the Chesapeake Bay Partnership’s BMP (Best Management Practice) expert panel report on nutrient assimilation in oyster tissue.

How-To Calculate Oyster Credits

MDE has created a credit calculation tool to determine potential credits for certification which you can find HERE.

Figure 2. Credits per Oyster

<table>
<thead>
<tr>
<th>Oyster Credit Categories</th>
<th>Size Class (inches)</th>
<th>Diploid (g/oyster)</th>
<th>Triploid (g/oyster)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Nitrogen</td>
<td>Phosphorus</td>
</tr>
<tr>
<td>Small:</td>
<td>2.0 - 2.49</td>
<td>0.05</td>
<td>0.01</td>
</tr>
<tr>
<td>Medium:</td>
<td>2.5 - 3.49</td>
<td>0.09</td>
<td>0.01</td>
</tr>
<tr>
<td>Large:</td>
<td>&gt;3.5</td>
<td>0.15</td>
<td>0.02</td>
</tr>
</tbody>
</table>

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<thead>
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<th></th>
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</tr>
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<tr>
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<tr>
<td>Medium:</td>
<td>0.13</td>
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<tr>
<td>Large:</td>
<td>0.26</td>
<td>0.03</td>
</tr>
</tbody>
</table>
Credit Verification

Who can be a third party verifier?
- The Maryland Department of Natural Resources is currently the state’s only third party verifier.

Who do I contact at DNR to verify my credits?
- Please contact Karl Roscher (or his designate) via email at Karl.Roscher@maryland.gov.

What is the verification process?
- DNR will provide a verification form, and documentation. This information will determine if field verification is necessary.

How often will credits need to be verified?
- Annually, DNR’s Fisheries group will work with the grower to determine when the best time for verification based on harvest reports.