

**MD OAC
SUBSTRATE
SUBCOMMITTEE
DRAFT RECOMMENDATIONS**

17 June 2014

Substrate Subcommittee Members

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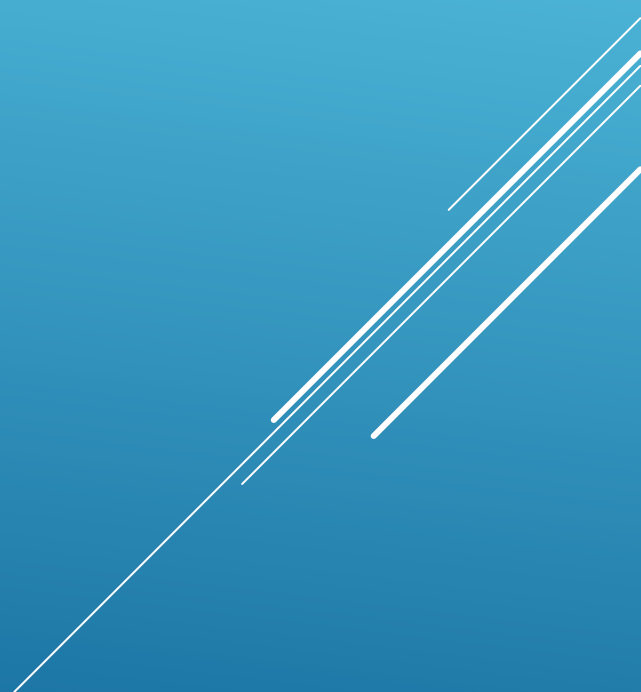
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Draft Recommendation #1

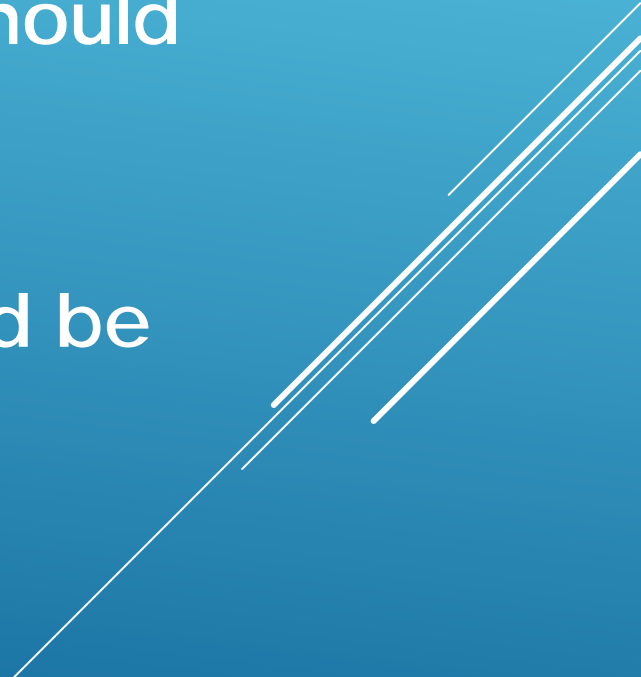
Given the currently limited fresh (green or shucking house) shell supply available in Maryland, shell inventory under the financial control of the State of Maryland should be reserved for hatchery-produced spat-on-shell until a 3-year reserve is available to the state.

Once this reserve level is reached, then the excess fresh shell should be used in an effective, intelligent way, recognizing its value to Chesapeake Bay oyster restoration.

Draft Recommendation #2

The State of Maryland should develop specifications for materials to be used as reef substrate and a protocol for the assessment of these materials, to determine under what conditions and for what uses the substrate should be employed.

With this information, a long-term database should be built for future evaluations.

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Draft Recommendation #3


The State of Maryland should at least annually assess and evaluate available substrate materials and placement methods.

This assessment will lead to more accurate calculations of the substrate materials' cost, period of effectiveness, and ability to provide suitable habitat for reef communities.

The results should be shared with relevant parties, leading to better design criteria for the restoration projects.


Draft Recommendation #4

For oyster restoration projects, the State of Maryland should use any materials that are structurally suitable and environmentally acceptable as the foundation layer, as long as hatchery-produced spat-on-shell is placed as the top layer above the foundation layer.

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Draft Recommendation #5

Continuing its efforts at smart decision-making in oyster restoration and with the overarching goal of maximizing the return on restoration investment dollars, the State of Maryland should use spat-on-shell as a top layer for all oyster restoration areas unless there has been an historical demonstration of acceptable spat-setting (meeting a pre-determined threshold) at the specific restoration site.



Draft Recommendation #6

The State should make every effort to identify and quantify sites where buried shell deposits could be mined. This would include locations of historic reefs and other sites where shell may have been deposited from previous restoration efforts. Every effort should be made to identify sites in close proximity to the actual restoration sites to minimize cost.

This information should be documented and shared with the OAC, as well as used to obtain future mining permits, if applicable.

Draft Recommendation #7

The State of Maryland should explore cost-effective ways to recover the buried shell deposits (from Recommendation #6) and place these materials as the foundation layer for oyster restoration.

The State should research environmentally sound removal practices and develop methods to enhance habitat at the source locations.


Draft Recommendation #8

The State of Maryland should further investigate the potential availability of buried shell deposits outside of Maryland as a source material for substrate.

A prime example would be the deposits in Virginia currently being mined by Purina for kitty litter. The State should explore this source in collaboration with the Commonwealth of Virginia.

Draft Recommendation #9

The State of Maryland should support research into and development of more efficient equipment for the cultivation, renovation, or placement of buried shell for use in oyster restoration (i.e., shell rehabilitation or renovation).



Follow-Up Actions??

