OAC Recommendations – Master List 10/21/14

Enforcement Subcommittee Recommendations

1. **Fleet modernization:** The vessel fleet of the NRP, especially the small vessel patrol boats, is dilapidated and desperately needs replacing. It is recommended that six (6) additional small vessels be immediately provided at approximately $110,000/ a piece ($660,000) and added to the NRP vessel replacement budget. It is also recommended that these new vessels be equipped with MLEIN compatible equipment. In addition, NRP should be given a dedicated line item amount in the yearly budget for the predictable replacement of vessels.

2. **Vehicle replacement:** The vehicle fleet of the NRP is dilapidated and urgently needs replacing. The age of the vehicle fleet requires a wasteful amount of taxpayer money to maintain and reduction of officer hours which could be spent in enforcement. It is recommended that all vehicles with 150,000 miles or more be replaced immediately and the NRP be given a line item amount in the yearly budget for the predictable replacement of vehicles.

3. **Vessel Monitoring System:** It is recommended that Vessel Monitoring Systems (VMS) tracking devices be required on the vessels of commercial watermen with violations. This recommendation is carried forward from the 2008 Oyster Advisory Commission Report and is now more urgent. The vessel monitoring system device and the fees associated with it should be paid for by the offender.

4. **Helicopters:** It is recommended that DNR explore more feasible and accessible options for restoring helicopter capabilities to NRP as a force multiplier

5. **Dedicated Assistant Attorney General:** It is recommended that DNR/NRP use all power at its disposal to obtain and work with a dedicated Assistant Attorney General to work on NRP cases from inception. The assignment of each case should be on a formal referral system to ensure smooth transition and to obviate legal problems with the NRP cases from the very beginning of the case. This Assistant Attorney General should also be charged with working with NRP to train NRP officers to provide feedback from monitoring of the disposition of cases. The Assistant Attorney General would also be in a position to oversee cases involving seizure of boats and equipment.

6. **MLEIN Support:** It is recommended that funds to be allocated for routine maintenance of the existing MLEIN towers and cameras in Harris Creek. In addition, it is recommended that DNR/NRP use all powers at their disposal to build MLEIN towers for placement of radar and cameras in the Tred Avon and Little Choptank Rivers.

7. **Human Resources:** The NRP needs, at a minimum, to have the manpower capabilities it had before the merger of NRP and the Maryland Park Services in 2006. The work load of the NRP has increased with the addition of new and very serious duties including but not limited to, Homeland Security. The NRP is also charged with protection of the massive investment

represented by the oyster restoration projects in the tributaries. The NRP should have immediate funding for an additional 70 officers to meet patrol requirements.

8. **NRP Taskforce:** In light of the fact that the cost of oyster restoration in Harris Creek, the Little Choptank and the Tred Avon Rivers alone exceeds $70,000,000, coupled with the fact that the Harris Creek oysters are reaching harvestable age, the NRP should immediately set up a task force of ten (10) officers working in conjunction with the dedicated Assistant Attorney General, and charged exclusively with protecting these vital and precious investments of taxpayer funds in Harris Creek, Little Choptank and Tred Avon Rivers. The task force should report to the OAC on a quarterly basis regarding the means, methods and metrics used for measurement of success in protecting the oysters in these tributaries.

9. **Courtroom Support:** It is recommended that the NRP formalize the recent Administrative mandate that the officers are to bring a certified copy of the Defendant's record to court and that the disposition of citations issued be collated and used on an ongoing basis for the training of NRP officers in court procedure. Further, that court cases and their outcomes be reported to a designated officer and used for continued training of NRP officers on a regular and timely basis on why specific cases were won or lost.

10. **Seizure/Forfeiture:** It is recommended that the NRP use their authority to seize vessels and equipment upon arrest and/or ticket issuance if harvesters on board are taking oysters or clams without a commercial license, operating with a suspended license or committing theft in prohibited, protected or leased waters. NRP should exercise this power and the seizure/forfeiture case should be a joint case between the Assistant Attorney General and the case officer from inception. Upon conviction, the offender should pay all costs associated with seizure. In addition to providing an effective means of deterrence widely used by other jurisdictions, it is reasonable to expect that it would result in a source of revenue.

11. **Preclusion from Fishing:** It is recommended that the DNR effect regulations precluding a shellfish aquaculture lease applicant or leaseholder from obtaining or holding a permit for such activities upon a conviction of taking shellfish illegally.

12. **Further Action/Fishery Closure:** It is recommended that DNR monitor the oysterpopulation of Harris Creek, as well as the Tred Avon and Little Choptank Rivers on a regular basis to ascertain if oysters have been illegally harvested and report back to OAC within six (6) months. If there is evidence of further poaching it is recommended that progressive and systemic measures be considered including, but not limited, to closing aspects of the public oyster fishery in order to protect the vital and necessary expenditure on oyster restoration and the future of the Chesapeake Bay.

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Land-use Subcommittee Recommendations

13. The Maryland Department of Natural Resources (Maryland DNR) should consider current and future land use in the prioritization of oyster restoration efforts in sanctuaries, including the designation of and planning for new tributaries to achieve the Chesapeake Bay Watershed Agreement outcome to "Restore native oyster habitat and populations in 10 tributaries by 2025 and ensure protection." Maryland DNR should collaborate with the MD Department of Planning and MD Department of the Environment (MDE) to ensure that future growth projections and water quality considerations are part of this evaluation to "ensure protetion."
14. Maryland DNR should apply the model of Maryland's Greenprint, used to establish Targeted Ecological Areas (representing lands and watersheds of high ecological value that have been identified as conservation prioritie) to develop a "Blueprint" that identifies similar priorities for aquatic habitats of high ecological value to sustain healthy oyster populations.
15. Maryland DNR should engage MDE to prioritize oyster reef protection in the execution of Watershed Implementation Plans (WIPs) required by the Total Maximum Daily Load provisions of the Clean Water Act. Those WIPs that achieve maximum ecological return on investment, including oyster reef habitat preservation and achieving established oyster metrics, should be implemented first.
16. MD DNR, MD Department of Planning and MDE should work together to develop a guide for local land use planners and decision makers on the importance of oyster reefs for fish habitat, water quality preservation and enhancement, and other valuable ecosystem services. This guide should be distributed through appropriate channels (e.g., Critical Area Commission, local planning departments, County Councils) to those local jurisdictions adjacent to or in the watersheds of oyster reef sanctuaries, including Talbot, Caroline, and Dorchester counties that are adjacent to the extensive restoration underway in the Choptank River complex.
17. Maryland has developed new policies to address the siting of onsite wastewater treatment (septic) systems, including required installation of "Best Available Technology" for development of new lots. MD DNR should work with MDE to consider additional requirements to address failing or failed septic systems that can contaminate surface and groundwater, ultimately posing risks and problems with shellfish contamination.

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Substrate Subcommittee Recommendations

18. Natural oyster shell is the preferred substrate for oyster restoration. However, given the scarcity of the natural shell resource, it is recommended that Maryland DNR can use any substrate materials that are structurally suitable and environmentally acceptable as the foundation layer, as long as a shell veneer (with or without spat) is placed as the top layer above the foundation layer.

19. Recognizing that large portions of the Maryland Bay waters do not have sufficient natural recruitment, it is recommended the Maryland DNR should use hatchery-produced 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. It is also recommended that Maryland DNR evaluate their recruitment data, determine this threshold, and report their findings back to the OAC for its review.

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

21. It is recommended that Maryland DNR 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.

22. It is recommended that Maryland DNR identify existing information sources/references that point to areas where buried shell deposits could be mined, and that they develop a plan, including cost, to further evaluate these locations for potential mining volumes. These areas should include locations of historic reefs and other sites where shell may have been deposited from previous restoration efforts. This information should be documented and shared with the OAC, as well as used to obtain future mining permits, if applicable.

23. It is recommended that Maryland DNR explore cost-effective ways to recover the buried shell deposits (from Recommendation #5) and place these materials as the foundation layer for oyster restoration. It is also recommended that Maryland DNR research environmentally sound removal practices and develop methods to enhance habitat at the source locations.

24. It is recommended that Maryland DNR further investigate the potential availability of buried shell deposits on land, including 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. It is recommended that Maryland DNR explore this source in collaboration with the Commonwealth of Virginia.

25. It is recommended that Maryland DNR 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).

26. It is recommended that Maryland DNR 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.

27. It is recommended that the State of Maryland increase tax incentives for recycling oyster shells (e.g., from restaurants) so as to enhance these recycling efforts.