March 15, 2017

TO: Scott Eglseder and Kelley Cox, Co-Chairs, Oyster Advisory Commission Mark Belton, Secretary, Maryland Department of Natural Resources

FROM: Peyton Robertson

RE: NOAA Comments on MD DNR "Consolidated Strawman Management Plan Proposal: Proposed changes to current oyster management areas 2/13/2017 Draft Version 1"

Restoration Context

- NOAA endorses the "Guidelines for Proposed Changes" on slide 3 that there be "No changes to the three restoration partnership sanctuaries," reflecting no harvest allowed in those areas.
- NOAA supports proceeding with selection of the 4th and 5th large scale restoration partnership sanctuaries (previously agreed at OAC to call these "restoration tributaries.")
- NOAA supports the "Oyster Management Review: 2010-2015" report statement "The <u>Manokin and St. Mary's River</u> sanctuaries show potential to achieve Bay Agreement restoration goals without significant financial investment." These 2 tributaries meet multiple sanctuary objectives shown on the

OAC_CandidateRestorationPartnershipSanctuaries_2017Mar13 slides (distributed to the OAC on Friday, March 10 meeting), with desired aspects highlighted below in green. We have included the Nanticoke River for comparison as a third potential candidate.

Sanctuary Objective	MANOKIN	ST MARYS	NANTICOKE
	RIVER	RIVER	RIVER
Facilitate development of natural disease resistance	Historic	Historic	Historic
	Disease &	Disease &	Disease &
	Mortality =	Mortality =	Mortality =
	Low	<mark>Low</mark>	Low
Serve as a reservoir of reproductive capacity	Historic Spatset	Historic	Historic
	= <mark>Med</mark>	Spatset = <mark>High</mark>	Spatset = Low
	Larval	Larval	Larval
	Retention =	Retention =	Retention =
	<mark>Sink</mark>	<mark>Sink</mark>	Sink & Source
Provide broad geographic distribution across all salinity zones	<mark>High</mark> Salinity Zone	<mark>Medium</mark> Salinity Zone	Same salinity zone (Low)



Increase ability to protect from poaching	Enforceability	Enforceability	Enforceability
	= <mark>High</mark>	= <mark>High</mark>	= High
Potential for success with little financial investment	Restorable	Restorable	Restorable
	Acres = <mark>508</mark>	Acres = <mark>260</mark>	Acres = 718
	Oyster Density	Oyster Density	Oyster Density
	= <mark>9.67</mark>	= <mark>39.79</mark>	= Unknown

• In order to proceed expeditiously to achieve the Chesapeake Bay Watershed Agreement oyster restoration outcome, it will be necessary to use alternative substrates in restoration tributaries. NOAA supports the use of stone, as monitoring results from Harris Creek to date indicate stone outperforms shell and is more readily available than shell. On slide 25, under "restoration activity," the language in the three bullets should be condensed to read: "Shell is limited, and the use of alternative substrates in the 5 restoration tributaries is recommended, as it increases the total availability of reefbuilding substrate across all sectors."

Science Context

- MD DNR should rely on the peer-reviewed science of the "Oyster Management Review: 2010-2015" report for decisions in considering any changes to sanctuary boundaries.
- Tier 1 sanctuaries are described in the report as "generally responding well in the
 absence of harvest which supports the conclusion that these areas should be
 maintained as sanctuaries." These Tier 1 sanctuaries generally show high biomass,
 illustrating their value as a reservoir of reproductive capacity (broodstock) that will
 benefit both restoration efforts and natural spat set for adjacent/nearby Public Shellfish
 Fishery Areas.
- Structurally complex oyster reef habitat is critical to many species, including forage fish.
 The report provides primarily biological information as the basis for assessment of oyster sanctuaries. As has been acknowledged, benthic surveys for many of Maryland's oyster reef habitats are dated, limiting current knowledge of these areas. Additional survey efforts to identify the most structurally complex habitats within Tier 1 sanctuaries could be undertaken to ensure protection of the ecological gains made through their protection.
- Given the habitat value of oyster reefs for productive fisheries, including highly valued commercial and recreational species such as striped bass, NOAA urges MD DNR to carefully consider trade-offs associated with changes to sanctuary boundaries and use conservation equivalency to offset any habitat losses with concomitant habitat gains elsewhere.