Public Comments submitted to the
Virginia Department of Environmental Quality
For the Richmond County No Discharge Zone Application

Public Comment:

From: Becky Roberts [mailto:broberts@catoctin.com]
Sent: Wed 10/20/2010 10:25 PM
To: Smigo, Margaret (DEQ)
Subject: RE: **REMINDER** Comment period for the Farnham and Lancaster Creeks (in Richmond Co) draft NDZ application ends Monday Nov. 8th...

Margaret, I haven't followed this in detail. I read a confusing article in the paper that implied that in a No Discharge Zone you couldn't run your bilge pump or wash your boat. Is that true?

In reading, the state regs say: "*All discharge of sewage, whether treated or not, and other wastes from all vessels into designated No Discharge Zones is prohibited.*" So I guess the question is whether the regs include a definition of "other wastes". Does it?

My basic view is that no one should be disposing of toilet waste into any body of water, but that some things -- shower water, bilge water, boat washing (how could you do that without it going into the body of water that the boat is on?) should be allowed.

Thanks for the help understanding the issues!

Becky Roberts, CPF, PMP
Catoctin Consulting, LLC
office: 540-882-3593, mobile: 703-472-3313, fax: 540-882-3597
devoted to improving organizational performance

DEQ Response:

From: Smigo, Margaret (DEQ)
Sent: Sunday, October 31, 2010 7:29 PM
To: broberts@catoctin.com
Subject: RE: **REMINDER** Comment period for the Farnham and Lancaster Creeks (in Richmond Co) draft NDZ application ends Monday Nov. 8th...

Hi Ms. Roberts,
Sorry for not responding sooner - I've been out of town and am catching up on emails. A NDZ applies only to the discharge from your MSD type I/II. It does not apply to any type of "gray water" discharge.

I hope this answers your question. The "other wastes" from your quote below does not include "gray water" discharges. The press is misinterpreting the regs I believe, although I have not read the article you spoke of.

Let me know if you have any other questions.

Best Regards,
Margaret Smigo

Friends of the Rappahannock
Advocacy • Restoration • Education

P.O. Box 7254 • Fredericksburg, VA 22404
Ph (540) 373-3448 • Fax (540) 373-8111
Email: info@riverfriends.org
Web: www.riverfriends.org

November 4, 2010

VADEQ – Piedmont Regional Office
ATTN: Margaret Smigo, TMDL Coordinator
4949-A Cox Road
Glen Allen, VA 23060-6296

RE: Proposed No Discharge Zone for Farnham and Lancaster/Morratico Creeks

Dear Ms. Smigo,

On behalf of the Friends of the Rappahannock, I would like to express our strong support for the establishment of No Discharge Zones (NDZs) in Farnham and Lancaster/Morattico Creeks, tributaries to the Rappahannock River.

Both Farnham Creek and Lancaster/Morattico Creeks are listed on the 303(d) List of Impaired Waters as impaired for bacterial contamination based on state water-quality standards for shellfish. Further, these waters are listed as impaired by the 2006 Water Quality Assessment for Dissolved Oxygen, and all waters of the Rappahannock River and the Chesapeake Bay and its tributaries are listed as impaired due to excess nutrients.

The TMDL indicates that there are many sources of bacterial and nutrient impairments of the Rappahannock and its tidal tributaries. Failing septic systems, agricultural runoff, residential runoff, and boat discharges all contribute to the problem. Each of these sources must be addressed if we are to achieve restoration of safe water and viable a shellfishery in the tidal Rappahannock.

Boat discharges represent a pollution source that is readily identifiable, undisputable, and solvable at minimal cost relative to other sources.

Even *treated* sanitary wastewater discharged from boats contains concentrated bacterial loads, having fecal coliform counts ranging from 200 to more than 1,000 Most Probable Number (MPN) per 100milliliters of water (Source: Lynnhaven Boat Wastewater Sampling Program. January 7, 2008). The current shellfish standard for fecal coliform bacteria allows for a maximum geometric mean of 14 per 100 milliliters (ml) of water and a 90th percentile not to exceed 49 MPN/100ml over a 30-month period. Clearly, boat discharges can and do discharge waters that contribute to the ongoing bacterial impairment in these watersways. By extension, they contribute to the 9,456 acres of “Restricted” shellfish harvest areas in the Rappahannock, and the depressed seafood economy in the Northern Neck.

Further, the average marine sanitation device provides little, if any, treatment for chemical or biological oxygen demand, phosphorus, or nitrogen. These pollutants are being discharged into the Rappahannock, a nitrogen-limited estuary that already experiences more than 2 cubic kilometers of hypoxic water each summer (Cheaspeake Bay Program. August, 2009) – seven times the sum of the hypoxic volume in all Virginia's other Bay tributaries combined. As such, boat discharges are a clear contributor to a major water quality and living resource impairment.

While the relative magnitude of loads from boat discharges vs. failed septic systems may be arguable, that does not constitute a valid reason to avoid or delay the implementation of measures to curb these loads. It is a responsibility of the Commonwealth to move forward on implementation of the TMDL, of which limitations on discharge is an important part. This is especially true given that the solution (tank pumping or discharge outside the zones) represents a relatively minor inconvenience to the affected parties.

Thank you for you consideration of our comments. If you have any questions, please feel free to contact me at 540-373-3448 x111.

John P. Tippett
Executive Director

cc: May Sligh, VaDCR
Stuart McKenzie, NNPDC

DEQ Response:

From:	Smigo, Margaret (DEQ)
Sent:	Tuesday, January 11, 2011 7:38 PM
To:	'John Tippett'
Cc:	Sligh, May (DCR); Stuart McKenzie; Jerry W. Davis; 'aeguiguren@nnpdc17.state.va.us'; Alling, Mark (DEQ)
Subject:	RE: Comments on Proposed NDZ: Farnham and Lancaster/Morratico Creeks (comments received 11/4/10)

Good Evening Mr. Tippett,

DEQ thanks you for comments submitted in regard to the draft application for No Discharge Zones for Farnham and Lancaster Creek. NDZs have far-reaching, positive implications. Through the establishment of NDZs, boaters would be required to safely dispose of their sewage waste in marine pump-out facilities or dump stations. No discharges of boat sewage waste, whether treated or untreated, would be allowed in these designated areas (does not apply to greywater). The establishment of NDZs would improve overall water quality in Virginia which, in turn, would have positive results for the citizens of Virginia. These benefits include:

1.) reduced potential incidence of illness due to recreational activities (swimming, etc.) in contaminated waters;
2.) reduced potential incidence of illness due to raw shellfish consumption;
3.) reopening of some portions of seasonally condemned shellfish areas, thus allowing the direct harvest of shellfish.

An additional benefit of the proposed NDZs in these tidal tributaries is that any nutrients associated with human waste from boat discharge (MSDs) would also be prevented from entering the waterway. Therefore, the NDZs will assist not only in reducing the amount of bacteria which enter the waterways and have the potential to negatively affect human health, but will also reduce the amount of nutrients which may enter this and downstream estuaries, including the Chesapeake Bay. NDZs are only part of Virginia's plan to improve water quality in terms of bacteria and nutrients and DEQ agrees that there is much work to be done to prevent surface runoff of these pollutants as well.

DEQ and the NNPDC have since revised the application utilizing comments from stakeholders such as yourself and EPA. The three main changes in the revised draft pertain to the following:

(1) *Inclusion of the Lancaster County side of Lancaster Creek.* Due to the difficulty in utilizing the established EPA formula to calculate service requirements for half of any given creek, the Richmond County application now incorporates all of Lancaster Creek, including the Lancaster County portion. The Lancaster County portion was excluded in the first draft of the No Discharge Zone application.

(2) *Updated Facility Information.* In section 3 of the application, the hours of operation for Whelan's Marina were changed from 24 hours per weekend to 5 hours per weekend in order to reflect the information provided in writing by Whelan's Marina. Also, Garrett's Marina, located on the Essex County side of the Rappahannock River, was included as an alternative marina located within a reasonable distance from the proposed No Discharge Zone. This addition is for informational purposes only and Garrett's services are not included in the calculations of the EPA formula in Section 7 of the application.

(3) *Updated Number of Vessels and Estimated Number of Facilities Needed* (sections 3.3 and 7 of the application). In the interest of obtaining a conservative estimate of the number of facilities needed to provide pumpout and dump-station services for every potential vessel in the proposed NDZ, the formula now uses the combined totals from marina surveys (i.e., Field Data) and numbers from the U.S. Coast Guard. Also, because all of Lancaster Creek is now part of the application (including the Lancaster County portion), a proportional number of boats from Lancaster County was added to Richmond County's total vessels, based on the number of E911 structures that are part of Lancaster Creek's watershed on the Lancaster County side of the creek.

Also, the DEQ under approval of VDH, will include the Certificate to Operate statements for Whelan's and Garrett's Marina as an appendix in the revised application. Both facilities are inspected and permitted by the VDH and have shown to operate in accordance with the *Sanitary Regulations for Marinas and Boat Moorings*.

The revised draft will be available on the DEQ website: http://www.deq.virginia.gov/tm dl/ndz.html on or before January 17th. The official public comment period for the revised draft begins on January 18th and will expire February 16th, 2011.

DEQ would like to request your review and comments on the revised draft. Please send your comments to Margaret Smigo 4949-A Cox Road, Glen Allen, VA 23060 or you may email them to Margaret.Smigo@deq.virgnia.gov or you may fax them to (804)527-5106 at the attention of Margaret Smigo.

Again, DEQ thanks you for your time and involvement of the Farnham and Lancaster Creeks NDZ application project and looks forward to reviewing your comments for the revised draft.

Best Regards,

Margaret Smigo
VA DEQ – Piedmont Regional Office
TMDL Regional Coordinator

Public Comments submitted to the
Virginia Department of Environmental Quality
For the Richmond County No Discharge Zone Application

Public Comment:

From: Dave Bresett [dbresett@nnwifi.com]
Sent: Thursday, November 04, 2010 12:36 PM
To: Smigo, Margaret (DEQ)
Subject: NDZ Comments
Margaret,

I oppose the designation of NDZ' in Richmond County for the following reasons:

1. No Discharge Zone (NDZ) designation has no effect on boaters except to take away their option to discharge treated waste, as is done by and will continue to be done by municipal sewage treatment systems on the Chesapeake Bay and its tidal tributaries. Harmful discharges from boats, such as oil, anti-freeze and raw sewage are already illegal and prohibited.
2. No Discharge Zone Designation has no effect on any other source of Bay pollution.
3. NDZ designation could help in certain low flow areas with a high concentration of boats. The science is unclear on how much this would help regarding discharge of treated waste. What would help more in these areas is better enforcement of previously existing laws prohibiting discharge of raw sewage.
4. Currently there is no effective way to detect or enforce raw sewage discharges on the open waters of the Chesapeake Bay or its tidal tributaries.
5. Widely available and fully operational pump-out facilities in combination with high quality on board treatment technology is the best way to ensure boaters minimize raw waste discharges to the Chesapeake Bay. Experienced boaters know that pump-out stations alone will not foster full compliance.
6. It is not a matter of boater education. Boaters are well aware of the ecosystem, discharge laws, and the availability, or lack thereof, of reasonably available pump-out stations; but on the open water are often faced with pump overboard or overflow into the boat. Either choice is unacceptable. On a hot summer day, miles from a pump-out station, with guests on board, and time at a premium, we know the choice many people will make.
7. Since the likelihood of getting caught is, in the real world, essentially zero, a pump-out only NDZ designation even with huge fines and the threat of incarceration, will not be as effective as conveniently operated, fully functional, certified onboard treatment systems.
8. Out in the open flowing waters of a large estuary like the Chesapeake Bay and its tidal tributaries, boat discharge of treated waste from a high quality system will have no measurable effect on the ecosystem and is a much better choice than raw sewage.

Thank you for this opportunity to respond.
Dave Bresett
462.7074

DEQ Response:

Sent: Friday, May 20, 2011 9:22 AM
To: 'Dave Bresett'
Cc: Alling, Mark (DEQ); Lazarus, David (DEQ); McKercher, Elizabeth (DEQ)
Subject: RE: Richmond County NDZ Comment Period
Attachments: DEQ_re_DBresett_Rich_Co_rev_NDZ_5_19_11.pdf

Good Morning Mr. Bresett,

Thank you for the public comments submitted on Feb. 16th, 2011 for the revised draft application for the Richmond Co NDZ. We appreciate your patience and hope the attached response document answers those comments to your satisfaction.

Best Regards,

Margaret Smigo
VA DEQ Piedmont Regional
TMDL Coordinator
Office (804)527-5124
Visit the VA DEQ Website
www.deq.virginia.gov/tmdl/

Follow-up Public Comment:

From: Dave Bresett [dbresett@nnwifi.com]
Sent: Wednesday, February 16, 2011 12:37 PM
To: Smigo, Margaret (DEQ)
Subject: Richmond County NDZ Comment Period

Margaret,

Reference is made to all prior comments that I have submitted under the Boaters For Clean Wather banner in re subject.

Please consider those prior comments as satisfying this request with no changes noted. BCW still believes that a comprehensive arsenal in the war on polution is part of a correct posture for DEQ to adopt. The sole use of holding tanks has its shortcomings and the effectiveness of Type 1 devices has been demonstrated by EPA. Why the self limiting mindset on the part of DEQ?

Regards,
Dave Bresett

Public Comment:

November 8, 2010

Response to DEQ Request for Comments

Respectfully Submitted by Boaters for Clean Water (BCW)

BCW is a grassroots organization created to avoid No Discharge Zone (NDZ) designation for certain tidal creeks and tributaries of the Northern Neck of Virginia. We oppose any and all efforts to establish NDZ's that have the net effect of outlawing perfectly viable and certified Type 1 and Type 2 Marine Sanitary Devices that not only enhance our ability to fight pollution, but moreover, provide a more effective weapon in our war against pollution in the Chesapeake Bay Region.

Presentation of this petition to the EPA, as is, will risk making false statements to a Federal agency for the purpose of obtaining a rule making decision.

All references below to performance data of the ElectroScan can be verified by EPA Test (Project Number 0214.00.020,September 18, 2008 which can be accessed in whole at www.epa.gov/nrmrl/pubs/600r10008/600r10008.pdf . The data from the 10 day test is voluminous but findings from this test are in the Executive Summary. Supporting data is contained in sections following. DEQ personnel have in the past picked isolated data to suggest misleading conclusions contrary to those in the Executive Summary. This is misrepresentation of facts by a state agency.

Information Specific to the DEQ Petition In RE Lancaster and Farnham Creeks

1. There is only one pumpout station for Farnham and Lancaster Creeks. This is grossly inadequate.
    a. The access depth to that pumpout makes it inaccessible to all but very shallow draft boats.
    b. The Pumpout empties into an onsite near water septic tank.
    c. It is portable. Yard personnel must tow it to the dock to operate it.
    d. The location is closed Saturday at noon and all day Sunday and after 5:00 PM on weekdays. These are times of peak need. It is also often closed in cold months.

e. The dockage space available for a pumpout is very limited.
f. The DEQ petition to EPA misstated that the pumpout is open 24/7/365.
g. Boats in Farnham creek must travel a long distance including open exposed waters to reach the pumpout.
h. The petition admitted that there are many other sources of pollution in the area and said that these have not been addressed. The most recent Department of Health study indicated large amounts of animal and human waste going into the water, including open sewage lines from residential sources. This has not been addressed.
i. The petition only "assumed" that boats were a source of pollution, offering no evidence for the assumption.
j. Paragraph 2.3 says that it can be assumed that pollution comes from anchored boats. Paragraph 2.1 says there are no anchorages.
k. In section 2.3 it misrepresents the effectiveness of certified onboard devices. It cites an antiquated standard allowing fecal coliform content of 200 to 1000 MPN per 100 milliliters of water in the effluent of Type 1 and 2 devices. See 4 below.

2. There are NO available pumpouts for workboats. The only dump station is at the marina with the pumpout. This marina has limited transient dock space. The dumped material, including chemicals, will go into an onsite septic system near the water
3. There is no showing of popular support. One person from another part of the state said that people in his area were in favor of and NDZ there, but he gave no credentials as to his authority to speak for anyone else. There has been strong local opposition and thiswas shown at the hearing by BCW, which includes commodores or their designees of the 4 area yacht clubs. No local citizen spoke in favor of the petition except an employee of Northern Neck Planning District Commission which had been paid $125,000.00 from Stimulus Funds to support the petition.
4. The petition gives misleading and inaccurate information. To Wit:
    a. Section 2.3 says that " Even treated sanitary wastewater discharged from boats is relatively concentrated, having fecal coliform counts ranging from 200 to more than 1,000 Most Probable Number (MPN) per 100 milliliters of water." Those numbers are not factual but come from an antiquated EPA standard. In fact, EPA Test (Project Number 0214.00.020,September 18, 2008) at page 4-7 (4.3.1) found that: The ElectroScan (manufactured by Raritan Engineering) removed almost all (99.99%) of pathogen indicators." Pathogen Indicators include Fecal Coliform, E. Coli and Enterococci. This is far better than that standard.
    b. The petition fails to include the fact that Raritan, NMMA, BoatUS and others are requesting the EPA to make its standard more stringent and EPA is in the process of reconsidering whether to improve this standard.
    c. Another Unit, the Thermpure, (manufactured by Grocco, Inc.) produced poor results but the testers found that a component wasn't working properly and began a retest with a corrected unit. However this retest was cancelled due to shortage of funds. If this device works inadequately it should not be certified by EPA to be used on any boats. However its shortcomings should not be used to judge the ElectroScan.
    d. The petition states that "The average marine sanitation device provides little, if any, treatment for chemical or biological oxygen demand, phosphorus, or nitrogen." In fact there are no chemicals in the effluent of the ElectroScan nor of the Thermapure unit.

And the test cited above found that the ElectroScan did reduce nutrient. The amount of nutrient at issue is equivalent to approximately one handful of leaves.

e. The Petition at section 2.4 says that "The current shellfish standard for fecal coliform bacteria allows for a maximum geometric mean of 14 per 100 milliliters (ml) of water and a 90th percentile not to exceed 49 MPN/100ml over a 30-month period." It fails to state that The ElectroScan unit produces effluent with a much lower (safer) geometric mean than that of the shellfish standard.
f. The petition in section 3.3 states that less than one pumpout facility (0.03) and less than one dump station (0.43) is needed to serve the estimated 865 vessels expected to use such services. If this fiction formula is allowed, there will be boats that cannot get pumpouts when needed and which will be forced to dump raw sewage from their holding tanks unless they can use a certified onboard device.

Information Regarding NDZs in General

5. It is already illegal to discharge sewage into our waters.
6. NDZ's generally cause more, not less pollution.
7. News media and the public have been repeatedly giving misleading information by DEQ as to the issues.
8. There are now two methods of dealing with sewage from boats: EPA certified onboard treatment devices and pumpouts. An NDZ eliminates one of those methods in the area. This causes more pollution because:
    a. Some boats cannot access pumpouts. Reasons include lack of availability, pumpout breakdowns, insufficient room to navigate to pumpouts, not enough water depth, bad weather, distance.
    b. Most boats with toilets experience times when the holding tank is full and there is no pumpout available.
    c. In both the above cases, a properly working certified onboard treatment device allows the boater to discharge treated effluent rather than illegally dump sewage.
    d. A properly working certified onboard treatment device treats sewage as well as or better than many public treatment centers.
    e. Pumpouts around the water often dump large concentrated amounts of sewage into septic tanks near the water.
    f. That sewage often contains chemicals that must be added to the boat tank to stabilize smell and gas buildup. Those chemicals are injurious to septic tanks and surrounding waters into which they leach.
    g. In many areas that were designated NDZ long ago, sewage from boats is a continuing problem because boaters can't use certified onboard treatment devices there. The NDZ designation isn't working in these areas.
    h. There are far more malfunction opportunities in a pumpout system than with a certified onboard treatment device.

BCW welcomes challenges to our facts and stands ready to work with DEQ on this issue of great importance to boaters, the boating community, and the population in general.

Thank you for this opportunity to set the record straight.

Please note that BCW would appreciate an opportunity to provide oral comments to the Water Control Board once the DEQ petition reaches that level in the process.

Sincerely,

Boaters for Clean Water

Lancaster, VA

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
4949A Cox Road, Glen Allen, Virginia 23060
(804) 527-5020 Fax (804) 527-5106
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Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

May 19, 2011

Mr. Dave Bresett
Boaters for Clean Waters
Lancaster, VA 22503

Dear Mr. Bresett:

Thank you for your comments dated 11/4 and 11/8 for the original draft version of the Richmond County NDZ application for Farnham and Lancaster Creeks . On 2/16/11, you submitted a comment reiterating your original comments during the public comment period for the revised draft NDZ application.

DEQ has prepared responses (in bold) to each of your comments (in italics).

DEQ appreciate your group's efforts to participate in the process and trust that we have assisted in resolving remaining issues.

Sincerely,

Margaret Smigo
VDEQ Piedmont Regional TMDL Coordinator

Enclosures

Cc: Mark Alling
David Lazarus
Elizabeth McKercher

Attachment: Staff responses to public comments received from Mr. Bresett

DEQ Response to Dave Bresett RE: Citizen public comment received 2/16/11 for revised NDZ draft application for Farnham and Lancaster Creeks in Richmond Co. (including Lancaster Co. portion of Lancaster Creek)
5/6/2011

1) Reference is made to all prior comments that I have submitted under the Boaters for Clean Water banner in re subject.

DEQ Response: DEQ has responded to your previous comments in subsequent pages.

2) Please consider those prior comments as satisfying this request with no changes noted. BCW still believes that a comprehensive arsenal in the war on pollution is part of a correct posture for DEQ to adopt. The sole use of holding tanks has its shortcomings and the effectiveness of Type 1 devices has been demonstrated by EPA. Why the self limiting mindset on the part of DEQ?

DEQ Response: DEQ has prepared the Richmond County NDZ application in accordance with EPA's guidance document to provide additional protection to the shellfish growing waters which are impaired for bacteria. DEQ believes NDZs, if approved by EPA, would be an effective tool for not only improving water quality but also for raising watershed stewardship awareness of boaters as well.

DEQ Response to Dave Bresett RE: Citizen public comment received 11/4/10 for original NDZ draft application for Farnham and Lancaster Creeks in Richmond Co. (including Lancaster Co. portion of Lancaster Creek)
5/6/2011

1) *No Discharge Zone (NDZ) designation has no effect on boaters except to take away their option to discharge treated waste, as is done by and will continue to be done by municipal sewage treatment systems on the Chesapeake Bay and its tidal tributaries. Harmful discharges from boats, such as oil, anti-freeze and raw sewage are already illegal and prohibited.*

2) *No Discharge Zone Designation has no effect on any other source of Bay pollution.*

DEQ Response to 1 & 2: NDZs can be a useful tool when additional protection of waterways is necessary to prevent further degradation of water quality or valuable resources. Municipal sewage outfalls are assigned with prohibited zones in order to protect humans from consuming shellfish harvested from those waterways. In contrast, MSD effluent can occur in direct proximity to shellfish growing beds. While there are some MSDs which excel at bacteria removal, the government does not mandate the particular device which must be used, rather, it provides the minimum treatment required for Type I and II. EPA states," Although individual discharges from vessels and marinas are relatively small scale, their combined effects can significantly degrade water quality and marine habitats". The Bay watershed is impaired for bacteria, dissolved oxygen, and the majority is impaired for submerged aquatic vegetation.

3. *NDZ designation could help in certain low flow areas with a high concentration of boats. The science is unclear on how much this would help regarding discharge of treated waste. What would help more in these areas is better enforcement of previously existing laws prohibiting discharge of raw sewage.*

4. *Currently there is no effective way to detect or enforce raw sewage discharges on the open waters of the Chesapeake Bay or its tidal tributaries.*

DEQ Response to 3 & 4: NDZs are being suggested for Lancaster Creek (in Richmond and Lancaster Co) and Farnham Creek. DEQ and the NNPDC believe both waterways have sub-optimal flushing capacity - in part due to sedimentation at the mouths. While preventing illicit discharges has and will continue to be a challenge, enforcement of the NDZ is an effective watershed stewardship awareness tool which can prevent illegal dumping and prevent additional discharges from MSDs in sensitive or impaired waterbodies.

5. *Widely available and fully operational pump-out facilities in combination with high quality on board treatment technology is the best way to ensure boaters minimize raw waste discharges to the Chesapeake Bay. Experienced boaters know that pump-out stations alone will not foster full compliance.*
6. *It is not a matter of boater education. Boaters are well aware of the ecosystem, discharge laws, and the availability, or lack thereof, of reasonably available pump-out stations; but on*

the open water are often faced with pump overboard or overflow into the boat. Either choice is unacceptable. On a hot summer day, miles from a pump-out station, with guests on board, and time at a premium, we know the choice many people will make.

7. *Since the likelihood of getting caught is, in the real world, essentially zero, a pump-out only NDZ designation even with huge fines and the threat of incarceration, will not be as effective as conveniently operated, fully functional, certified onboard treatment systems.*

DEQ Response to 5-7: In addition to the response given to comments 3 & 4, localities have the option to mandate additional protective measures of waterways if they so choose. For example, Virginia Beach requires boaters with tanks to insert a dye tablet into their MSDs following a pumpout, making detection of discharges and enforcement of a NDZ much easier. People have the obligation to make the responsible choice. Education and watershed stewardship, which is part of a NDZ designation, increases the likelihood that boaters will make the choice to protect water quality. There will very likely be a percentage of boaters that illegally discharge, regardless of the presence or absence of a NDZ. Some boaters will view any regulation as an inconvenience and will be unwilling to observe discharge prohibition regardless of the severity of impairment to water quality or aquatic resources.

8. *Out in the open flowing waters of a large estuary like the Chesapeake Bay and its tidal tributaries, boat discharge of treated waste from a high quality system will have no measurable effect on the ecosystem and is a much better choice than raw sewage.*

DEQ Response: The NDZ ensures that direct and proximal discharges to sensitive waters, such as shellfish growing beds, can be protected. A NDZ is not being proposed for the Chesapeake Bay, rather, VA DEQ is proposing NDZ designation for its waterways which meet the EPA guidance criteria.

DEQ Response to Dave Bresett RE: Comment received 11/8/10 for original NDZ draft application for Farnham and Lancaster Creeks in Richmond Co. (including Lancaster Co. portion of Lancaster Creek) on behalf of Boaters for Clean Water
5/6/2011

Presentation of this petition to the EPA, as is, will risk making false statements to a Federal agency for the purpose of obtaining a rule making decision.

All references below to performance data of the ElectroScan can be verified by EPA Test (Project Number 0214.00.020,September 18, 2008 which can be accessed in whole at www.epa.gov/nrmrl/pubs/600r10008/600r10008.pdf . The data from the 10 day test is voluminous but findings from this test are in the Executive Summary. Supporting data is contained in sections following. DEQ personnel have in the past picked isolated data to suggest misleading conclusions contrary to those in the Executive Summary. This is misrepresentation of facts by a state agency.

DEQ Response: DEQ has prepared the Richmond County NDZ application in accordance with EPA's guidance document to provide additional protection to the shellfish growing waters which are impaired for bacteria. DEQ believes the NDZs, if approved by EPA, would be an effective tool for improving water quality and will promote watershed stewardship of boaters as well. Neither DEQ nor NNPDC have intentionally "picked" information to mislead EPA or the public in the draft application. All calculations and estimations provided within the document were derived using the best data available.

1. *There is only one pumpout station for Farnham and Lancaster Creeks. This is grossly inadequate.*
    a. *The access depth to that pumpout makes it inaccessible to all but very shallow draft boats.*

       DEQ Response: DEQ has added an exclusion to the revised draft application for boats that have =3' draught requirements. Boats meeting the exclusion may operate their MSD within or outside of the NDZ area.

    b. *The Pumpout empties into an onsite near water septic tank.*
    c. *It is portable. Yard personnel must tow it to the dock to operate it.*

    DEQ Response for "b" & "c": Whelan's Marina meets compliance requirements of the VDH Marina program. The facility is inspected on a yearly basis.

    d. *The location is closed Saturday at noon and all day Sunday and after 5:00 PM on weekdays. These are times of peak need. It is also often closed in cold months.*

    DEQ Response: The revised application includes Whelan's Marina operational hours for Saturday from 8am – 12noon. In actuality, these are very conservative

operating times. DEQ contacted the marina on April 14, 2011, and staff indicated they are open Monday – Friday 8am - 5pm and Saturdays 8am – 12pm. They are also open on Sundays between Memorial and Labor Day holidays.

e. The dockage space available for a pumpout is very limited.

DEQ Response: Whelan's Marina stated in a survey completed 8/13/2010 that they have 40 slips available. The dockage space available for pumpouts is comparable to the boating traffic it receives. Using very conservative estimates and the EPA calculator, it is expected that the facility is equipped to service peak demand.

f. The DEQ petition to EPA misstated that the pumpout is open 24/7/365.

DEQ Response: DEQ and the NNPDC have corrected the operating hours for the facility (please see response to 1"d").

g. Boats in Farnham creek must travel a long distance including open exposed waters to reach the pumpout.

DEQ Response: Boats in Farnham Creek may choose to travel the ~5 miles to Whelan's Marina to pumpout their tank or may opt to utilize their MSD outside of the NDZ areas (~2 ½ miles). Garret's Marina, across the Rappahannock River, could also be used (~4 miles).

h. The petition admitted that there are many other sources of pollution in the area and said that these have not been addressed. The most recent Department of Health study indicated large amounts of animal and human waste going into the water, including open sewage lines from residential sources. This has not been addressed.

DEQ Response: TMDL studies were completed and approved by EPA on 8/2/2006 for Lancaster and Farnham Creeks. While an Implementation Plan (IP) has not yet been completed there are SWCD personnel who work with the agricultural community to promote water conservation and to educate farmers in regards to water quality issues. The VDH – Division of Shellfish Sanitation conduct sanitary surveys every 8 years to identify potential bacteria sources in the watershed which could impact water quality in regards to shellfish harvest. VDH has purview in regards to onsite sanitary systems and can regulate violations should they be discovered. While non-point sources of bacteria in the watershed are present and must be mitigated to improve water quality, there is opportunity for die-off and as the bacteria are washed closer to the waterbody. In contrast, boat-tank effluent (untreated or treated) can be discharged in direct proximity to shellfish growing beds creating an immediate impact on the local water quality.

i. *The petition only "assumed" that boats were a source of pollution, offering no evidence for the assumption.*

DEQ Response: EPA states," Although individual discharges from vessels and marinas are relatively small scale, their combined effects can significantly degrade water quality and marine habitats".
Type I MSDs have a performance standard of no more than 1000 fecal coliform/100 ml and Type II devises may have no more than 200 fecal coliform/100ml and no more than 150 mg/l total suspended solids. Until such standards are made more stringent by EPA, MSDs regardless of treatment device utilized (Electro Scan or otherwise) are treated equally (by type) in regard to the standard. While there are some MSDs which excel at bacteria removal, the government does not mandate the particular device which must be used, rather, it provides the minimum treatment required for Type I and II. It is also unknown how many of the advanced-type MSDs are in use.

j. *Paragraph 2.3 says that it can be assumed that pollution comes from anchored boats. Paragraph 2.1 says there are no anchorages.*

DEQ Response: "Anchorages" in the application were at the time of NN PDC survey of the waterbody. Transient boaters or anchorages are possible and may be ongoing, but were not observed during the survey by NNPDC.

k. *In section 2.3 it misrepresents the effectiveness of certified onboard devices. It cites an antiquated standard allowing fecal coliform content of 200 to 1000 MPN per 100 milliliters of water in the effluent of Type 1 and 2 devices. See 4 below.*

DEQ Response: See response for 1("i").

2. *There are NO available pumpouts for workboats. The only dump station is at the marina with the pumpout. This marina has limited transient dock space. The dumped material, including chemicals, will go into an onsite septic system near the water*

DEQ Response: DEQ has added an exclusion to the revised draft application for boats that have =3' draught requirements. Boats meeting the exclusion may operate their MSD within or outside of the NDZ area (workboats would likely fit the criteria) or may choose to utilize the pumpout facility at Garret's Marina across the Rappahannock. Also, please see response for "e".

3. *There is no showing of popular support. One person from another part of the state said that people in his area were in favor of and NDZ there, but he gave no credentials as to his authority to speak for anyone else. There has been strong local opposition and this was shown at the hearing by BCW, which includes commodores or their designees of the 4 area yacht clubs. No local citizen spoke in favor of the petition except an employee of Northern Neck Planning District Commission which had been paid $125,000.00 from Stimulus Funds to support the petition.*

DEQ Response: During the first comment period in October, DEQ received letters of support for the NDZ in Richmond County from the Department of Conservation and Recreation and the non-profit group, Friends of the Rappahannock River, which currently has 1800 members.

4. *The petition gives misleading and inaccurate information. To Wit:*
    a. *Section 2.3 says that " Even treated sanitary wastewater discharged from boats is relatively concentrated, having fecal coliform counts ranging from 200 to more than 1,000 Most Probable Number (MPN) per 100 milliliters of water." Those numbers are not factual but come from an antiquated EPA standard. In fact, EPA Test (Project Number 0214.00.020,September 18, 2008) at page 4-7 (4.3.1) found that: The ElectroScan (manufactured by Raritan Engineering) removed almost all (99.99%) of pathogen indicators." Pathogen Indicators include Fecal Coliform, E. Coli and Enterococci. This is far better than that standard.*
    b. *The petition fails to include the fact that Raritan, NMMA, BoatUS and others are requesting the EPA to make its standard more stringent and EPA is in the process of reconsidering whether to improve this standard.*
    c. *Another Unit, the Thermpure, (manufactured by Grocco, Inc.) produced poor results but the testers found that a component wasn't working properly and began a retest with a corrected unit. However this retest was cancelled due to shortage of funds. If this device works inadequately it should not be certified by EPA to be used on any boats. However its shortcomings should not be used to judge the ElectroScan.*
    d. *The petition states that "The average marine sanitation device provides little, if any, treatment for chemical or biological oxygen demand, phosphorus, or nitrogen." In fact there are no chemicals in the effluent of the ElectroScan nor of the Thermapure unit. And the test cited above found that the ElectroScan did reduce nutrient. The amount of nutrient at issue is equivalent to approximately one handful of leaves.*
    e. *The Petition at section 2.4 says that "The current shellfish standard for fecal coliform bacteria allows for a maximum geometric mean of 14 per 100 milliliters (ml) of water and a 90th percentile not to exceed 49 MPN/100ml over a 30-month period." It fails to state that The ElectroScan unit produces effluent with a much lower (safer) geometric mean than that of the shellfish standard.*

    DEQ Response to 4"a" - "e": Please see responses to 1 ("i"). The MSD devices utilized in the study by EPA were new systems operated under laboratory conditions. Longer term field trials would likely render variable results above and below those reported. Routine maintenance of MSDs and performance inspections are not currently required in Virginia and are generally the responsibility of the boater. As a result, performance efficiency could vary. There are a number of variables that influence performance and efficiency of an MSD, including stability and voltage of electric current, water salinity (MSDs are not for use in freshwater and require salinity

additives in brackish water), amount of pumping required to move waste through treatment tanks, amount of time waste is left in tanks b/w treatments, quantity of waste treated, frequency of system maintenance, as well as the competency of operator.

f. *The petition in section 3.3 states that less than one pumpout facility (0.03) and less than one dump station (0.43) is needed to serve the estimated 865 vessels expected to use such services. If this fiction formula is allowed, there will be boats that cannot get pumpouts when needed and which will be forced to dump raw sewage from their holding tanks unless they can use a certified onboard device.*

DEQ Response: DEQ and the Northern Neck PDC utilized *"Protecting Coastal Waters from Vessel and Marina Discharges: A Guide for State and Local Officials. Volume I. Establishing No Discharge Areas under Section 312 of the Clean Water Act. August 1994. EPA 842-B-94-004"*, which includes a calculator for determining the number of pump-out and dump stations necessary to service peak-demand, along with conservative boat estimates, and conservative hours of operation by Whelan's Marina (included in the calculation) and Garret's Marina (not included in the calculation but provided as an alternative pump-out location). Whelan's Marina satisfies the requirement of a single pump-out and dump-station. Garrett's Marina was included as an alternative should Whelan's Marina not be available for use. In addition, boats with = 3' draught may operate their MSD (which are in compliance with 33 CFR Part 159) within waters outside of any approved NDZ waterway. EPA's formula along with the use of conservative estimates is the tool which states use to determine whether there are adequate facilities to service peak-demand for pump-outs and dump-stations. DEQ and NN PDC have included the boats which would technically be excluded from the NDZ (due to = 3' draught requirement) within the calculation, even though they could have been removed. This further demonstrates the conservativeness of the calculation.

Information Regarding NDZs in General

5. *It is already illegal to discharge sewage into our waters.*

DEQ Response: The NDZ designation offers additional protection of the waterbody by prohibiting the discharge of effluent treated by MSDs. It is also effective at raising watershed awareness and promoting the improvement of water quality through education.

6. *NDZ's generally cause more, not less pollution.*

DEQ Response: DEQ's NDZ program seeks to balance water quality improvement with the cost and difficulty in addressing discharge of sewage waste from boats, particularly those with older model MSDs. NDZs can be a useful tool when

additional protection of waterways is necessary to prevent further degradation of water quality or valuable resources.

7. *News media and the public have been repeatedly giving misleading information by DEQ as to the issues.*

   DEQ Response: DEQ is not aware of incorrect information being distributed. The draft application has been corrected to revise the operating hours of Whelan's Marina (and other minor errors which have been corrected).

   There are now two methods of dealing with sewage from boats: EPA certified onboard treatment devices and pumpouts. An NDZ eliminates one of those methods in the area. This causes more pollution because:

   a. *Some boats cannot access pumpouts. Reasons include lack of availability, pumpout breakdowns, insufficient room to navigate to pumpouts, not enough water depth, bad weather, distance.*
   b. *Most boats with toilets experience times when the holding tank is full and there is no pumpout available.*
   c. *In both the above cases, a properly working certified onboard treatment device allows the boater to discharge treated effluent rather than illegally dump sewage.*
   d. *A properly working certified onboard treatment device treats sewage as well as or better than many public treatment centers.*

   DEQ Response to 8 "a"-"d": Please see responses to 1 ("a"-"g" and "i").

   e. *Pumpouts around the water often dump large concentrated amounts of sewage into septic tanks near the water.*
   f. *That sewage often contains chemicals that must be added to the boat tank to stabilize smell and gas buildup. Those chemicals are injurious to septic tanks and surrounding waters into which they leach.*

      DEQ Response: Please see response for 1("b"). While those additives are not ideal for onsite treatment systems, they are even more detrimental when discharged directly to the waterbody in the proximity of shellfish beds, from an MSD.

   g. *In many areas that were designated NDZ long ago, sewage from boats is a continuing problem because boaters can't use certified onboard treatment devices there. The NDZ designation isn't working in these areas.*

      DEQ Response: DEQ would like to know what NDZ areas have these problems (state/waterbody). It is important to understand the conditions surrounding these issues so that we might avoid them in Virginia. Virginia DEQ has observed successful implementation of a NDZ in the Lynnhaven River and will be evaluating the other NDZs areas which have been

designated (for example, Broad/Jackson Creeks and Fishing Bay) over the next few years.

h. *There are far more malfunction opportunities in a pumpout system than with a certified onboard treatment device.*

DEQ Response: Please see response to 4("a" - "e") and 1 ("i").

Douglas W. Domenech
Secretary of Natural Resources

David A. Johnson
Director

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

203 Governor Street
Richmond, Virginia 23219-2010
(804) 786-1712

REPLY TO:
DCR Tappahannock Regional Office
P. O. Box 1425
Tappahannock, VA 22560
Telephone: (804) 443-1494

November 5, 2010

Ms. Margaret Smigo
VADEQ – Piedmont Regional Office
4949A Cox Road
Glen Allen, Virginia 23060-6296

Dear Ms. Smigo,

The VA DCR Tappahannock Regional Office would like to offer strong support for the designation of No Discharge Zones (NDZs) in Farnham and Lancaster/Morattico Creeks, tributaries of the Rappahannock River.

As these creeks are currently designated as impaired for bacterial contamination of shellfish waters, any measures taken to reduce the discharge of bacteria laden boat waste will serve as a benefit towards their restoration. These creeks are also impaired for dissolved oxygen due to excessive nutrients and, like the Rappahannock River and the Chesapeake Bay, would stand to benefit as well from reduced nutrient pollution.

As expressed in the TMDL study, there are numerous sources of bacteria from terrestrial sources in these watersheds. And despite the lack of a formal implementation plan, best management practices for farmed land and problematic septic systems have been and continue to be used to reduce bacteria and nutrient runoff. The proper management of boat waste is an integral part of protecting these small, shallow tidal coves and the shellfish habitat they provide. A requirement for MSD "treated" boat waste to be pumped out into holding tanks at marinas is just one tool of many that may restore these creeks, providing for safer fisheries and recreation. Efforts must be made to reduce all sources of bacteria entering shellfish growing areas due to the very restrictive water column bacteria standard for shellfish consumption. Even though the contribution of bacteria from boat waste may not compare to the level from other land based runoff sources, the opportunity to reduce human waste to these creeks and the Rappahannock River will further citizen awareness of the actions we must all take in watershed restoration.

We commend the Northern Neck Planning District Commission for the extensive work provided for this application. The document is clear and provides the necessary details for EPA to use in evaluating the ability of a NDZ to work in these areas. As expressed in the public meeting on October 5, alternatives for pump-outs at times when the marina is closed on weekend should be investigated to ensure pump-out access during periods of higher boating activity, like weekends and holidays. As well, rather than establish an NDZ in just half of Lancaster/Morattico Creek, it is preferred that the entire creek be included and therefore coordination with Lancaster County be sought prior to the formal application submittal.

Coupled with an educational/outreach effort for local and transient boaters, a NDZ in these areas could have a positive impact to shellfish harvesting. Building a stronger community of responsible boaters throughout the region can only be a benefit to the work we do for Chesapeake Bay restoration. The VA DCR Tappahannock Regional Office is pleased to see the NDZ initiative taking place in our region and applaud the efforts of citizens, planners and VA DEQ staff for initiating this process.

Sincerely,

May Sligh
TMDL Watershed Field Coordinator

Cc: Charlie Lunsford, VA DCR

DEQ Response:

From:	Smigo, Margaret (DEQ)
Sent:	Tuesday, January 11, 2011 7:41 PM
To:	Sligh, May (DCR)
Cc:	Lunsford, Charlie (DCR); Davis, Wayne (DCR); Alling, Mark (DEQ); 'aeguiguren@nnpdc17.state.va.us'; Jerry W. Davis; Stuart McKenzie; Lazarus, David (DEQ)
Subject:	RE: Farnham, Lancaster Morratico Creeks NDZ application (comments submitted on 11/8/10)

Dear Mrs. Sligh,

DEQ thanks you and DCR for comments submitted in regard to the draft application for No Discharge Zones for Farnham and Lancaster Creek. NDZs have far-reaching, positive implications. Through the establishment of NDZs, boaters would be required to safely dispose of their sewage waste in marine pump-out facilities or dump stations. No discharges of boat sewage waste, whether treated or untreated, would be allowed in these designated areas (does not apply to greywater). The establishment of NDZs would improve overall water quality in Virginia which, in turn, would have positive results for the citizens of Virginia. These benefits include:

1.) reduced potential incidence of illness due to recreational activities (swimming, etc.) in contaminated waters;

2.) reduced potential incidence of illness due to raw shellfish consumption;

3.) reopening of some portions of seasonally condemned shellfish areas, thus allowing the direct harvest of shellfish.

An additional benefit of the proposed NDZs in these tidal tributaries is that any nutrients associated with human waste from boat discharge (MSDs) would also be prevented from entering the waterway. Therefore, the NDZs will assist not only in reducing the amount of bacteria which enter the waterways and have the potential to negatively affect human health, but will also reduce the amount of nutrients which may enter this and downstream estuaries, including the Chesapeake Bay. NDZs are only part of Virginia's plan to improve water quality in terms of bacteria and nutrients and DEQ agrees that there is much work to be done to prevent surface runoff of these pollutants as well.

DEQ and the NNPDC have since revised the application utilizing comments from stakeholders such as yourself and EPA. The three main changes in the revised draft pertain to the following:

(1) *Inclusion of the Lancaster County side of Lancaster Creek.* Due to the difficulty in utilizing the established EPA formula to calculate service requirements for half of any given creek, the Richmond County application now incorporates all of Lancaster Creek, including the Lancaster County portion. The Lancaster County portion was excluded in the first draft of the No Discharge Zone application.

(2) *Updated Facility Information.* In section 3 of the application, the hours of operation for Whelan's Marina were changed from 24 hours per weekend to 5 hours per weekend in order to reflect the information provided in writing by Whelan's Marina. Also, Garrett's Marina, located on the Essex County side of the Rappahannock River, was included as an alternative marina located within a reasonable distance from the proposed No Discharge Zone. This addition is for informational purposes only and Garrett's services are not included in the calculations of the EPA formula in Section 7 of the application.

(3) *Updated Number of Vessels and Estimated Number of Facilities Needed* (sections 3.3 and 7 of the application). In the interest of obtaining a conservative estimate of the number of facilities needed to provide pumpout and dump-station services for every potential vessel in the proposed NDZ, the formula now uses the combined totals from marina surveys (i.e., Field Data) and numbers from the U.S. Coast Guard. Also, because all of Lancaster Creek is now part of the application (including the Lancaster County portion), a proportional number of boats from Lancaster County was added to Richmond County's total vessels, based on the number of E911 structures that are part of Lancaster Creek's watershed on the Lancaster County side of the creek.

Also, the DEQ under approval of VDH, will include the Certificate to Operate statements for Whelan's and Garrett's Marina as an appendix in the revised application. Both facilities are inspected and permitted by the VDH and have shown to operate in accordance with the *Sanitary Regulations for Marinas and Boat Moorings.*

The revised draft will be available on the DEQ website: http://www.deq.virginia.gov/tm dl/ndz.html on or before January 17th. The official public comment period for the revised draft begins on January 18th and will expire February 16th, 2011.

DEQ would like to request your review and comments on the revised draft. Please send your comments to Margaret Smigo 4949-A Cox Road, Glen Allen, VA 23060 or you may email them to Margaret.Smigo@deq.virgnia.gov or you may fax them to (804)527-5106 at the attention of Margaret Smigo.

Again, DEQ thanks you for your support of the Farnham and Lancaster Creeks NDZ application project and looks forward to reviewing your comments for the revised draft.

Public Comment:

Nov. 6th 2010

From: John D. McConnico III, 117 Catch Penny Lane, P.O. Box 55, Lively, VA. 22507

Subject: Stakeholder Comments re Richmond County Application for NDZ Designation

As a retired marina owner of Yankee Point Sailboat Marina and Boat Services Associates, Past member American Boating and Yachting Council and Tidewater Marine Trade Association I have spent a good part of my life boating and fishing and sailing on the Chesapeake Bay and it's tributaries. I have advised and recommended to boaters what to do to help protect the Bay and its resources. We installed the pump out system currently in use at Yankee Point by it's present owner . We took the extra cost of covering the pump out system with a working light house in order to protect the beauty of our environment.

I am opposed to making any of the tributaries in the Northern Neck a total No Discharge Zone designation. We supplied and installed holding tanks as well as Electrosan effluent treatment systems in order to improve the water quality of our area. The pump out system is a fairly complicated piece of equipment that often broke down primarily because of improperly being operated by boaters who were unfamiliar with the proper valves to throw and the correct order in which they should be operated. Most of the time the boaters came to us for assistance in operating the valves and electrical switches. It became obvious that after struggling to operate the pump out system one or two times we did not see them again. They became prime customers for the Electrosan. All they had to do was push a button and modern technology did the rest. It was so simple to use that guest on board could easily be taught to operate it. It is my opinion that has been borne out by the facts that when there is no choice but a pump out system then more raw sewage will be pumped directly into the Bay and all tributaries.

I would like to ask that you keep the simple Electrosan and other treatment systems that meet the standards of the EPA as well as the pump out system for the protection of the Bay.

Respectfully submitted.

John D. McConnico lll

DEQ Response:

From:	Smigo, Margaret (DEQ)
Sent:	Tuesday, January 11, 2011 7:33 PM
To:	'cjdm3'
Cc:	'smckenzie@nnpdc17.state.va.us'; Jerry W. Davis; 'aeguiguren@nnpdc17.state.va.us'; Alling, Mark (DEQ); Lazarus, David (DEQ)
Subject:	RE: Stakeholder Comments re Farnham and Lancaster Creeks (received 11/7/10)

Good Evening Mr. McConnico,

DEQ thanks you for comments submitted in regard to the draft application for No Discharge Zones for Farnham and Lancaster Creek. NDZs have far-reaching, positive implications. Through the establishment

of NDZs, boaters would be required to safely dispose of their sewage waste in marine pump-out facilities or dump stations. No discharges of boat sewage waste, whether treated or untreated, would be allowed in these designated areas (does not apply to greywater). The establishment of NDZs would improve overall water quality in Virginia which, in turn, would have positive results for the citizens of Virginia. These benefits include:

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An additional benefit of the proposed NDZs in these tidal tributaries is that any nutrients associated with human waste from boat discharge (MSDs) would also be prevented from entering the waterway. Therefore, the NDZs will assist not only in reducing the amount of bacteria which enter the waterways and have the potential to negatively affect human health, but will also reduce the amount of nutrients which may enter this and downstream estuaries, including the Chesapeake Bay. NDZs are only part of Virginia's plan to improve water quality in terms of bacteria and nutrients and DEQ agrees that there is much work to be done to prevent surface runoff of these pollutants as well.

DEQ and the NNPDC have since revised the application utilizing comments from stakeholders such as yourself and EPA. The three main changes in the revised draft pertain to the following:

(1) *Inclusion of the Lancaster County side of Lancaster Creek.* Due to the difficulty in utilizing the established EPA formula to calculate service requirements for half of any given creek, the Richmond County application now incorporates all of Lancaster Creek, including the Lancaster County portion. The Lancaster County portion was excluded in the first draft of the No Discharge Zone application.

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(3) *Updated Number of Vessels and Estimated Number of Facilities Needed* (sections 3.3 and 7 of the application). In the interest of obtaining a conservative estimate of the number of facilities needed to provide pumpout and dump-station services for every potential vessel in the proposed NDZ, the formula now uses the combined totals from marina surveys (i.e., Field Data) and numbers from the U.S. Coast Guard. Also, because all of Lancaster Creek is now part of the application (including the Lancaster County portion), a proportional number of boats from Lancaster County was added to Richmond County's total vessels, based on the number of E911 structures that are part of Lancaster Creek's watershed on the Lancaster County side of the creek.

Also, the DEQ under approval of VDH, will include the Certificate to Operate statements for Whelan's and Garrett's Marina as an appendix in the revised application. Both facilities are inspected and permitted by the VDH and have shown to operate in accordance with the *Sanitary Regulations for Marinas and Boat Moorings*.

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DEQ would like to request your review and comments on the revised draft. Please send your comments to Margaret Smigo 4949-A Cox Road, Glen Allen, VA 23060 or you may email them to Margaret.Smigo@deq.virgnia.gov or you may fax them to (804)527-5106 at the attention of Margaret Smigo.

Again, DEQ thanks you for your time and involvement of the Farnham and Lancaster Creeks NDZ application project and looks forward to reviewing your comments for the revised draft.

Best Regards,

Margaret Smigo

VA DEQ – Piedmont Regional Office

TMDL Regional Coordinator

Public Comment:

Note: Comments included multiple attachments, which will be included in the final application. Please contact Elizabeth.mckercher@deq.virginia.gov, 804-698-4291 to obtain copies of the attachments.

Ms. Margaret Smigo
TMDL Regional Coordinator
Virginia Department of Environmental Quality
4949-A Cox road
Glen Allen, VA 23060
By: E-Mail to mjsmigo@deq.virginia.gov

RE: Comments in Opposition to NDZ Application dated 10 September, 2010 for NDZ designation Application to EPA for Richmond County, VA

Dear Ms. Smigo;

Please find attached to this cover letter several documents representing "Comments" from me as an individual and also on behalf of the Membership of Boaters for Clean Water of Virginia (BCW). I am also emailing this document to the email address above, but without the attached exhibits.

The enclosed documents are sent in **Opposition** to the proposed NDZ designation application dated 10 September, 2010 for Farnham and Lancaster/Morattico Creeks which is to be submitted to the Virginia State Water Control Board and/or the U.S. Environmental Protection Agency by or on behalf of DEQ.

Attached you will find the following:

1. Title Page, 1 page
2. Initial Comments and Background Information ,2 pages
3. Argument in Opposition to NDZ Application for Farnham and Lancaster/Morattico Creeks, 5 pages
4. List of Exhibits, dated 6 November 2010, to BCW Comments, consisting of 4 pages

Should you not receive any portion of the above documents please contact me by e-mail @ mconroy@va.metrocast.net or call 804-435-5600 as soon as possible, and I will re -send the information.

Please notify me of time and location of future hearings and comment periods in this matter. I would like to specifically reserve my right to speak at any further DEQ hearings and/or at any Virginia State Water Control Board hearings on the proposed regulations, and in all cases whenever this matter may come onto their respective Agendas.

Thank you for your consideration.

Michael Conroy
Commodore, Moran Creek Yacht Club
43 Bar Neck Lane Weems, VA 22576
INDIVIDUALLY AND ON BEHALF OF **BOATERS FOR CLEAN WATER@HOTMAIL.COM**

Initial Comments and Background Information

In attendance at a hearing held in Warsaw, Virginia on October 6th, 2010; were local resident citizens, government officials, members of the press and representatives of local boating organizations who were at that time presented with a draft application to the EPA, prepared by the Northern Neck Planning District Commission (NNPDC) at the request of and paid for (with Federal Stimulus money) by the Virginia Department of Environmental Quality (VADEQ).

After listening to the presentation, many comments from those attending from the Northern Neck of Virginia, and from one resident not from the affected area but from a nearby waterfront county, indicated a **Strong Opposition** to the application for many reasons, including, but not limited to:

- the proposed **NDZ application is based upon legislation that is fundamentally flawed**, overbroad in potential application to , and enforcement against, the class representing Virginia Boaters;(See Exhibit 1)

- The **application is inaccurate and improper** as it is based on limited, estimated, and assumed data, much taken from outdated and "out of the area" sources, and without initial or further physical verification; (See Exhibits 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)

- The proposed **NDZ designation does not address known existing pollution sources,** including cited violations by the Virginia Dept. of Health (VDH) in the affected areas and therefore **will not lead to any significant, measurable change in the impairment status/ecology** of the affected areas; (See Appendix, Exhibit # 2,3,4,5,16,17)

- The **application fails**, on its own terms through its use of unjustified limitations and changes in data collection, methodology and the simple application of common sense, **to determine the required EPA finding that adequate facilities such as pump-outs, both recreational and commercial, required dump stations, and consequently safe septic systems (within the definition of the Clean Water Act (CWA 312)), are reasonably available for the safe and sanitary removal and treatment of sewage**

from **ALL** vessels using the waters described therein. (See Exhibits 8, 9, 10, 11, 12, 13, 16, 17)

LIST OF EXHIBITS

6 NOVEMBER 2010

TO BCW COMMENTS

SUBMITTED IN **OPPOSITION** TO NNPDC/DEQ DRAFT APPLICATION

Dated 10 September 2010 applying TO EPA FOR NDZ DESIGNATION

Of Farnham and Lancaster/Morattico Creeks, Richmond, County, VA

EXHIBITS

1. Virginia Acts of Assembly- 2009 Session, Chapter 337 Amending VA Code &62.1-44.33 (H 1774),March 27, 2009
2. Commonwealth of VA, Dept of Health/DSS; Not. 023-120 dated 7/28/10 With Map (2 pages)
3. Commonwealth of VA, Dept of Health/DSS, shoreline sanitary survey dated 8/20/03
4. Commonwealth of VA, Dept of Health/DSS; Not. 024-070 dated 12/16/09 with Map (2 pages)
5. Commonwealth of VA, Dept of Health/DSS; Shoreline Sanitary survey, dated 2/12/04
6. VA Marine Resources Commission; Notice of Proposed Regulations Para. IV, sub-para 4
7. Rappahannock Record news Article, " Oysterman can work all but two public grounds statewide" by S. Jett, Oct 2010 (2 pages)
8. Table of Estimated vessels needing dump station facilities supplied by VA/DEQ in Public Hearing presentation dated 10/5/10 using estimations for Whelan's Marina and Campground (92 residencies) showing incorrect data collection due to improper limitations on boating population sources to achieve a "conservative" result
9. Photo of sample pump-out facility supplied by VA/DEQ dated 10/5/10 in Public Hearing presentation of same date

10. Whelan's Marina Website add dated 9/29/10 showing hours of operation in direct conflict with hours used by VA/DEQ /NNPDC in representations contained in draft EPA NDZ application of 9/10/10 (2 pages)

11. Actual photo of the Only pump-out facility available for All vessels at Whelan's Marina dated 11/4/10

12. Actual photos (2) of deteriorating "Dump Station" situated away from docking area and feeding into septic system without berms, splash guards, filters or other "safety" features

13. Draft "Application for Federal NDZX Designation to be submitted to EPA, Region III, by Commonwealth of VA, dated 9/10/10

14. Gloucester gazette Journal article (2 pgs.) dated 8/4/10 " Condemned waters in Gloucester, Mathews show sharp decline" a 30% drop from July, 1, 2009

15. Performance Evaluation Report, EPA streams contract # EP-C-05-059, Evaluation of improved Type I Marine Sanitation Device (MSDs) 3 pages, dated 9/28-08

16. Testimony of Associate Professor Emeritus of Marine Science , Leonard W. Haas to March 2010 hearing of the VA Marine Resources Commission regarding magnitude of damage incurred in shallow water creeks by dumping vessel sewage which contain harmful chemicals into marina septic systems indicating that boats with MSDs aboard (the more boats the better) a preferable alternative

17. E-mail response to BCW by Marina operator at Crockett's Landing, Carter's Creek VA (Northern Neck, Lancaster county) delineating issues with new mandated septic tank systems for Marina's and the resultant problem with pump-outs and the dumping of holding tanks into septic systems that do not allow that option

18. No Discharge Zone Public Meeting <u>Summary</u> & <u>Comments</u> from Richmond, County NDZ Application Hearing of 10/05/10 prepared by DEQ/NNPDC staff, leaving out substantial questions and issues to be resolved

19. <u>Actual Transcript</u> of comments made on behalf of Boaters for Clean Waters and provided to DEQ/NNPDC staff along with oral comments at the Public NDZ Application hearing of 10/05/10 for Richmond County, VA (2 pages)

20. Exhibits 1 thru 17 ,and 18 and 19 are hereby restated as Exhibit 20 of this Appendix and are to be fully incorporated in and included as a part of these Written Comments to the Application for NDZ designation dated 10 September,2010 and to the comments submitted for the Public Hearing for NDZ application by DEQ to EPA for Richmond County, VA

COMMONWEALTH of VIRGINIA

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Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

January 7, 2011

Mr. Mike Conroy
Commodore, Moran Creek Yacht Club
43 Bar Neck Lane
Weems, VA 22576

RE: Comments in Opposition to NDZ Application dated 10 September, 2010 for NDZ designation Application to EPA for Richmond County, VA (public comments received 11/8/2010)

Dear Mr. Conroy,

DEQ thanks you for comments submitted in regard to the draft application for No Discharge Zones for Farnham and Lancaster Creek. DEQ and the NNPDC have since revised the application utilizing comments from stakeholders such as yourself and EPA. The three main changes in the revised draft pertain to the following:

(1) *Inclusion of the Lancaster County side of Lancaster Creek.* Due to the difficulty in utilizing the established EPA formula to calculate service requirements for half of any given creek, the Richmond County application now incorporates all of Lancaster Creek, including the Lancaster County portion. The Lancaster County portion was excluded in the first draft of the No Discharge Zone application.

(2) *Updated Facility Information.* In section 3 of the application, the hours of operation for Whelan's Marina were changed from 24 hours per weekend to 5 hours per weekend in order to reflect the information provided in writing by Whelan's Marina. Also, Garrett's Marina, located on the Essex County side of the Rappahannock River, was included as an alternative marina located within a reasonable distance from the proposed No Discharge Zone. This addition is for informational purposes only and Garrett's services are not included in the calculations of the EPA formula in Section 7 of the application.

(3) *Updated Number of Vessels and Estimated Number of Facilities Needed* (sections 3.3 and 7 of the application). In the interest of obtaining a conservative estimate of the number of facilities

needed to provide pumpout and dump-station services for every potential vessel in the proposed NDZ, the formula now uses the combined totals from marina surveys (i.e., Field Data) and numbers from the U.S. Coast Guard. Also, because all of Lancaster Creek is now part of the application (including the Lancaster County portion), a proportional number of boats from Lancaster County was added to Richmond County's total vessels, based on the number of E911 structures that are part of Lancaster Creek's watershed on the Lancaster County side of the creek.

Also, the DEQ under approval of VDH, will include the Certificate to Operate statements for Whelan's and Garrett's Marina as an appendix in the revised application. Both facilities are inspected and permitted by the VDH and have shown to operate in accordance with the *Sanitary Regulations for Marinas and Boat Moorings*.

The revised draft will be available on the DEQ website: http://www.deq.virginia.gov/tmdl/ndz.html on or before January 17th. The official public comment period for the revised draft begins on January 18th and will expire February 16th, 2011.

DEQ would like to request your review and comments on the revised draft. Please send your comments to Margaret Smigo 4949-A Cox Road, Glen Allen, VA 23060 or you may email them to Margaret.Smigo@deq.virgnia.gov or you may fax them to (804)527-5106 at the attention of Margaret Smigo.

Again, DEQ thanks you for your time and involvement of the Farnham and Lancaster Creeks NDZ application project and looks forward to reviewing your comments for the revised draft.

Best Regards,

Margaret Smigo

Margaret Smigo
VA DEQ – Piedmont Regional Office
TMDL Regional Coordinator

Cc David Lazarus, DEQ
Jerry Davis, NNPDC
Stuart McKenzie, NNPDC
Alex Eguiguren, NNPDC

Public Comment:

November 8, 2010

Response to DEQ Request for Comments

Respectfully Submitted by Boaters for Clean Water (BCW)

BCW is a grassroots organization created to avoid No Discharge Zone (NDZ) designation for certain tidal creeks and tributaries of the Northern Neck of Virginia. We oppose any and all efforts to establish NDZ's that have the net effect of outlawing perfectly viable and certified Type 1 and Type 2 Marine Sanitary Devices that not only enhance our ability to fight pollution, but moreover, provide a more effective weapon in our war against pollution in the Chesapeake Bay Region.

Presentation of this petition to the EPA, as is, will risk making false statements to a Federal agency for the purpose of obtaining a rule making decision.

All references below to performance data of the ElectroScan can be verified by EPA Test (Project Number 0214.00.020,September 18, 2008 which can be accessed in whole at www.epa.gov/nrmrl/pubs/600r10008/600r10008.pdf . The data from the 10 day test is voluminous but findings from this test are in the Executive Summary. Supporting data is contained in sections following. DEQ personnel have in the past picked isolated data to suggest misleading conclusions contrary to those in the Executive Summary. This is misrepresentation of facts by a state agency.

Information Specific to the DEQ Petition In RE Lancaster and Farnham Creeks

1. There is only one pumpout station for Farnham and Lancaster Creeks. This is grossly inadequate.
    a. The access depth to that pumpout makes it inaccessible to all but very shallow draft boats.
    b. The Pumpout empties into an onsite near water septic tank.
    c. It is portable. Yard personnel must tow it to the dock to operate it.
    d. The location is closed Saturday at noon and all day Sunday and after 5:00 PM on weekdays. These are times of peak need. It is also often closed in cold months.

e. The dockage space available for a pumpout is very limited.
f. The DEQ petition to EPA misstated that the pumpout is open 24/7/365.
g. Boats in Farnham creek must travel a long distance including open exposed waters to reach the pumpout.
h. The petition admitted that there are many other sources of pollution in the area and said that these have not been addressed. The most recent Department of Health study indicated large amounts of animal and human waste going into the water, including open sewage lines from residential sources. This has not been addressed.
i. The petition only "assumed" that boats were a source of pollution, offering no evidence for the assumption.
j. Paragraph 2.3 says that it can be assumed that pollution comes from anchored boats. Paragraph 2.1 says there are no anchorages.
k. In section 2.3 it misrepresents the effectiveness of certified onboard devices. It cites an antiquated standard allowing fecal coliform content of 200 to 1000 MPN per 100 milliliters of water in the effluent of Type 1 and 2 devices. See 4 below.

2. There are NO available pumpouts for workboats. The only dump station is at the marina with the pumpout. This marina has limited transient dock space. The dumped material, including chemicals, will go into an onsite septic system near the water
3. There is no showing of popular support. One person from another part of the state said that people in his area were in favor of and NDZ there, but he gave no credentials as to his authority to speak for anyone else. There has been strong local opposition and thiswas shown at the hearing by BCW, which includes commodores or their designees of the 4 area yacht clubs. No local citizen spoke in favor of the petition except an employee of Northern Neck Planning District Commission which had been paid $125,000.00 from Stimulus Funds to support the petition.
4. The petition gives misleading and inaccurate information. To Wit:
    a. Section 2.3 says that " Even treated sanitary wastewater discharged from boats is relatively concentrated, having fecal coliform counts ranging from 200 to more than 1,000 Most Probable Number (MPN) per 100 milliliters of water." Those numbers are not factual but come from an antiquated EPA standard. In fact, EPA Test (Project Number 0214.00.020,September 18, 2008) at page 4-7 (4.3.1) found that: The ElectroScan (manufactured by Raritan Engineering) removed almost all (99.99%) of pathogen indicators." Pathogen Indicators include Fecal Coliform, E. Coli and Enterococci. This is far better than that standard.
    b. The petition fails to include the fact that Raritan, NMMA, BoatUS and others are requesting the EPA to make its standard more stringent and EPA is in the process of reconsidering whether to improve this standard.
    c. Another Unit, the Thermpure, (manufactured by Grocco, Inc.) produced poor results but the testers found that a component wasn't working properly and began a retest with a corrected unit. However this retest was cancelled due to shortage of funds. If this device works inadequately it should not be certified by EPA to be used on any boats. However its shortcomings should not be used to judge the ElectroScan.
    d. The petition states that "The average marine sanitation device provides little, if any, treatment for chemical or biological oxygen demand, phosphorus, or nitrogen." In fact there are no chemicals in the effluent of the ElectroScan nor of the Thermapure unit.

And the test cited above found that the ElectroScan did reduce nutrient. The amount of nutrient at issue is equivalent to approximately one handful of leaves.

e. The Petition at section 2.4 says that "The current shellfish standard for fecal coliform bacteria allows for a maximum geometric mean of 14 per 100 milliliters (ml) of water and a 90th percentile not to exceed 49 MPN/100ml over a 30-month period." It fails to state that The ElectroScan unit produces effluent with a much lower (safer) geometric mean than that of the shellfish standard.
f. The petition in section 3.3 states that less than one pumpout facility (0.03) and less than one dump station (0.43) is needed to serve the estimated 865 vessels expected to use such services. If this fiction formula is allowed, there will be boats that cannot get pumpouts when needed and which will be forced to dump raw sewage from their holding tanks unless they can use a certified onboard device.

Information Regarding NDZs in General

5. It is already illegal to discharge sewage into our waters.
6. NDZ's generally cause more, not less pollution.
7. News media and the public have been repeatedly giving misleading information by DEQ as to the issues.
8. There are now two methods of dealing with sewage from boats: EPA certified onboard treatment devices and pumpouts. An NDZ eliminates one of those methods in the area. This causes more pollution because:
    a. Some boats cannot access pumpouts. Reasons include lack of availability, pumpout breakdowns, insufficient room to navigate to pumpouts, not enough water depth, bad weather, distance.
    b. Most boats with toilets experience times when the holding tank is full and there is no pumpout available.
    c. In both the above cases, a properly working certified onboard treatment device allows the boater to discharge treated effluent rather than illegally dump sewage.
    d. A properly working certified onboard treatment device treats sewage as well as or better than many public treatment centers.
    e. Pumpouts around the water often dump large concentrated amounts of sewage into septic tanks near the water.
    f. That sewage often contains chemicals that must be added to the boat tank to stabilize smell and gas buildup. Those chemicals are injurious to septic tanks and surrounding waters into which they leach.
    g. In many areas that were designated NDZ long ago, sewage from boats is a continuing problem because boaters can't use certified onboard treatment devices there. The NDZ designation isn't working in these areas.
    h. There are far more malfunction opportunities in a pumpout system than with a certified onboard treatment device.

BCW welcomes challenges to our facts and stands ready to work with DEQ on this issue of great importance to boaters, the boating community, and the population in general.

Thank you for this opportunity to set the record straight.

Please note that BCW would appreciate an opportunity to provide oral comments to the Water Control Board once the DEQ petition reaches that level in the process.

Sincerely,

Boaters for Clean Water

Lancaster, VA

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Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

January 7, 2011

Mr. Tom Neale
PO Box 631
532 Mastons Wharf Road
Lancaster, VA 22503

RE: Richmond County NDZ Petition, Lancaster and Farnham Creeks, prepared by VA DEQ and NNPDC (public comments submitted on 11/8/10)

Dear Mr. Neale,

DEQ thanks you for comments submitted in regard to the draft application for No Discharge Zones for Farnham and Lancaster Creek. DEQ and the NNPDC have since revised the application utilizing comments from stakeholders such as yourself and EPA. The three main changes in the revised draft pertain to the following:

(1) *Inclusion of the Lancaster County side of Lancaster Creek.* Due to the difficulty in utilizing the established EPA formula to calculate service requirements for half of any given creek, the Richmond County application now incorporates all of Lancaster Creek, including the Lancaster County portion. The Lancaster County portion was excluded in the first draft of the No Discharge Zone application.

(2) *Updated Facility Information.* In section 3 of the application, the hours of operation for Whelan's Marina were changed from 24 hours per weekend to 5 hours per weekend in order to reflect the information provided in writing by Whelan's Marina. Also, Garrett's Marina, located on the Essex County side of the Rappahannock River, was included as an alternative marina located within a reasonable distance from the proposed No Discharge Zone. This addition is for informational purposes only and Garrett's services are not included in the calculations of the EPA formula in Section 7 of the application.

(3) *Updated Number of Vessels and Estimated Number of Facilities Needed* (sections 3.3 and 7 of the application). In the interest of obtaining a conservative estimate of the number of facilities needed to provide pumpout and dump-station services for every potential vessel in the proposed

NDZ, the formula now uses the combined totals from marina surveys (i.e., Field Data) and numbers from the U.S. Coast Guard. Also, because all of Lancaster Creek is now part of the application (including the Lancaster County portion), a proportional number of boats from Lancaster County was added to Richmond County's total vessels, based on the number of E911 structures that are part of Lancaster Creek's watershed on the Lancaster County side of the creek.

Also, the DEQ under approval of VDH, will include the Certificate to Operate statements for Whelan's and Garrett's Marina as an appendix in the revised application. Both facilities are inspected and permitted by the VDH and have shown to operate in accordance with the *Sanitary Regulations for Marinas and Boat Moorings*.

The revised draft will be available on the DEQ website: http://www.deq.virginia.gov/tmdl/ndz.html on or before January 17th. The official public comment period for the revised draft begins on January 18th and will expire February 16th, 2011.

DEQ would like to request your review and comments on the revised draft. Please send your comments to Margaret Smigo 4949-A Cox Road, Glen Allen, VA 23060 or you may email them to Margaret.Smigo@deq.virgnia.gov or you may fax them to (804)527-5106 at the attention of Margaret Smigo.

Again, DEQ thanks you for your time and involvement of the Farnham and Lancaster Creeks NDZ application project and looks forward to reviewing your comments for the revised draft.

Best Regards,

Margaret Smigo

Margaret Smigo
VA DEQ – Piedmont Regional Office
TMDL Regional Coordinator

Cc David Lazarus, DEQ
Jerry Davis, NNPDC
Stuart McKenzie, NNPDC
Alex Eguiguren, NNPDC

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Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

May 19, 2011

Mr. Tom Neale
Boaters for Clean Waters
P.O. Box 631
Lancaster, VA 22503

Dear Mr. Neale:

Thank you for your comments dated February 16, 2011, regarding the revised Farnham and Lancaster Creeks Revised NDZ application.

Enclosed are staff responses to your comments.

DEQ appreciate your group's efforts to participate in the process and trust that we have assisted in resolving remaining issues.

Sincerely,

Margaret Smigo
VDEQ Piedmont Regional TMDL Coordinator

Enclosures

Cc: Mark Alling
David Lazarus
Elizabeth McKercher

Attachment
Staff responses to public comments received from Mr. Tom Neale

DEQ Responses to Tom Neale RE: Public Comments received 2/16/11 for revised draft Richmond Co. NDZ application
5/7/11

1) There are not adequate pumpout facilities. 33 USC 1322 (f) (3) states: *After the effective date of the initial standards and regulations promulgated under this section, if any State determines that the protection and enhancement of the quality of some or all of the waters within such State require greater environmental protection, such State may completely prohibit the discharge from all vessels of any sewage, whether treated or not, into such waters, except that no such prohibition shall apply until the Administrator determines that adequate facilities for the safe and sanitary removal and treatment of sewage from all vessels are reasonably available for such water to which such prohibition would apply. Upon application of the State, the Administrator shall make such determination within 90 days of the date of such application.*

   DEQ Response: Whelan's Marina indicated a depth of 3' at low tide at their facility in a mail-in survey. DEQ and the Northern Neck PDC included verbiage in the draft NDZ document which excludes boats with draught requirements at or greater than 3 feet. Therefore, in Farnham or Lancater Creeks, boats with = 3' draught may operate their MSD (which are in compliance with 33 CFR Part 159) within or outside of the designated NDZ waterbody.

2) Whelan's marine has a controlling depth of around 3 feet at mean low water. (Verified by charts and shallow draft boat with depth finder.) Most commercial seafood harvesting vessels and many pleasure vessels large enough to have onboard toilets cannot access the docks to dump or pumpout. Further, this marina has no pumpout available for any vessels from 5 PM Friday to 8 AM Monday. Garret's marina is not in the area, is across a wide and often very rough body of water, and has similar depth and access restrictions. United States Code supersedes any agency regulation or formula to the contrary. It unequivocally states that there must be adequate facilities for **all** vessels.

   DEQ Response: DEQ and the Northern Neck PDC utilized *"Protecting Coastal Waters from Vessel and Marina Discharges: A Guide for State and Local Officials. Volume I. Establishing No Discharge Areas under Section 312 of the Clean Water Act. August 1994. EPA 842-B-94-004"*, which includes a calculator for determining the number of pump-out and dump stations necessary to service peak-demand, along with conservative boat estimates, and actual hours of operation by Whelan's Marina (included in the calculation) and Garret's Marina (not included in the calculation but provided as an alternative pump-out location). The formula estimated that 0.44 pump-out stations and 0.97 dump-stations were necessary to service peak demand. Whelan's Marina satisfies the requirement of a single pump-out and dump-station. Garrett's Marina was included as an alternative should Whelan's Marina not be available for use. In addition, boats with = 3' draught may operate their MSD (which are in compliance with 33 CFR Part 159) within waters outside of any approved NDZ waterway.

3) DEQ's position that it is acceptable for some boats to not have access to pumpouts, even if it were a lawful position, is directly contrary to the taxpayers' funded mission of DEQ which is to promote, not detract from, environmental quality. If *any* boat cannot access a

pumpout, there is significant likelihood that at some point it will have to dump untreated or treated sewage.

DEQ Response: DEQ and the NN PDC, having used EPA's Guidance for the proposal of NDZs (see above) find there are adequate facilities for the safe and sanitary removal and treatment of sewage from all vessels for such waters. EPA will make the final decision on the prepared application. In addition, boats which are exempt (see 1 above) may operate their MSD (which are in compliance with 33 CFR Part 159) within or outside of the designated NDZ waterbody.

4) DEQ has used an EPA formula which manipulates facts to reach a predetermined desired result as to whether there are adequate pumpouts. The absurdity and dishonesty of this is obvious with DEQ's conclusion that less than one pumpout facility (0.44) and less than one dump station (0.92) is needed. This agency's conduct harms rather than protects environmental quality. No formula can create adequate pumpout stations when there are none, or get a boat into a harbor which doesn't have deep enough water to accommodate the draft of that boat.

DEQ Response: EPA's formula along with the use of conservative estimates is the tool which states use to determine whether there are adequate facilities to service peak-demand for pump-outs and dump-stations. The formula determines whether or not there are enough facilities available based on local information which is entered into the formula. In addition to the information in responses 1 and 2, above, DEQ and NN PDC have included the boats which would technically be excluded from the NDZ (due to =3' draught requirement) within the calculation, even though they could have been removed. This further demonstrates the conservativeness of the calculation.

5) DEQ's calculations are that there are 75 boats in the affected waters which are 26-to-40 feet in length, and 373 are 16-to-26 feet in length (3.3). Most boats in the 26 to 40 foot range draw far too much water to access the pumpouts at Whelan's and Garrett's marinas. Many boats in the 24 to 26 foot range also draw too much.

DEQ Response: Please refer to answers 1-4 above.

6) This petition, with its deliberate misrepresentations, should not be presented to EPA. Those persons making knowing misrepresentations should be made legally accountable.

DEQ Response: As stated in response #2, DEQ has prepared the Richmond County NDZ application in accordance with EPA's guidance document. All calculations provided within the document were derived using the best data available.

Public Comment:

Jefferson D. Reynolds
Water Resource Policy and Legal Advisor

Dear Mr. Reynolds:

As an interested party to the NDZ proposals for the Northern Neck of Virginia, I want to express my appreciation for your willingness to listen to our concerns.

While No Discharge Zone sounds noble and may even have some politically correct value, the real effect is to eliminate the use of what may be the most effective means of pollution abatement available: Marine Sanitation Devices (MSD).

The discharge of waste into tidal waters is currently prohibited in all Virginia waterways. Therefore the proposed legislation would in effect only eliminate the use of MSD's.

For several reasons I believe this may be the best pollution abatement option available.

First MSD's are both functional and effective and are approved by the EPA.

Where as they like any piece of equipment can fail, when you consider the potential failure points, power and equipment, there are fewer than potential pump out failure points which include pump out equipment, pump to holding point, piping, septic systems, pump to haul and hauling to name some.

In addition to fewer failure points in most vessels when waste is held in a holding tank before being treated by an MSD there would be no discharge if the MDS system failed.

Lastly please consider the boater psychology with respect to the pump outs. It is difficult to determine when a holding tank my require pump out; pump out locations are often not accessible when needed or not operational or manned, weather conditions can seriously effect access to pump out facilities, many boats still do not have holding tanks, pump out facilities funded by VDEQ grants can not be used by commercial vessels (watermen?). Lastly it is very easy to discharge overboard.

MDS's are significantly easier to use (automatic in most cases), meet EPA standards and are installed by boaters willing to spend their money to be good environmental citizens.

Certainly boaters can be forced to use pump outs by large fines and significantly increased enforcement (if possible in these tight budget times), but why not support those willing to do the " Right Thing "

Please consider these issues and others in developing regulations that allow boaters to use all effective means at our disposal to maintain and improve the Bay that we all love.

Sincerely,

Frank H. Miller, Jr. PE

DEQ Response:

To: **'FMILLERPE@aol.com'**

Cc: **Lazarus, David (DEQ); Reynolds,**

Jefferson (DEQ); Alling, Mark (DEQ); McKercher, Elizabeth (DEQ)

Subject: **RE: NDZ Farnham and Lancaster Creeks**

Attachments:
DEQ_resp_FrankMiller_Rich_Co_rev_NDZ_5_19_11.pdf

Good Morning Mr. Miller,

Thank you for the public comments submitted on Feb. 16th, 2011 for the revised draft application for the Richmond Co NDZ. We appreciate your patience and hope the attached response document answers those comments to your satisfaction.

If you have any questions, please feel free to contact me.

Best Regards,

Margaret Smigo
VA DEQ Piedmont Regional
TMDL Coordinator
Office (804)527-5124

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Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

May 19, 2011

Mr. Frank Miller, Jr. PE
FMILLERPE@aol.com

Dear Mr. Miller:

Thank you for your comments dated February 16, 2011, regarding the revised Farnham and Lancaster Creeks Revised NDZ application.

Enclosed are staff responses (in bold) to your comments (in italics).

DEQ appreciate your participation in this process and trust that we have assisted in resolving remaining issues.

Sincerely,

Margaret Smigo
VDEQ Piedmont Regional TMDL Coordinator

Enclosures

Cc: Mark Alling
David Lazarus
Jeff Reynolds
Elizabeth McKercher

Attachment
Staff responses to public comments received from Mr. Frank Miller, Jr.

DEQ Responses to Frank Miller, Jr. RE: Public Comments received 2/16/11 via email for revised draft Richmond Co. NDZ application
5/9/11

While No Discharge Zone sounds noble and may even have some politically correct value, the real effect is to eliminate the use of what may be the most effective means of pollution abatement available: Marine Sanitation Devices (MSD).

DEQ Response: Type I MSDs have a performance standard of no more than 1000 fecal coliform/100 ml and Type II devises may have no more than 200 fecal coliform/100ml and no more than 150 mg/l total suspended solids. Until such standards are made more stringent by EPA, MSDs regardless of treatment device utilized (Electro Scan or otherwise) are treated equally in regard to the standard (by type). While there are some MSDs which excel at bacteria removal, the government does not mandate the particular device which must be used, rather, it provides the minimum treatment required for Type I and II. It is also unknown how many of the advanced-type MSDs are in use.

The discharge of waste into tidal waters is currently prohibited in all Virginia waterways. Therefore the proposed legislation would in effect only eliminate the use of MSD's.

DEQ Response: The NDZ designation offers additional protection of sensitive waters, such as shellfish growing beds, by prohibiting the direct and proximal discharge of effluent treated by MSDs. It is also effective at raising watershed awareness and promoting the improvement of water quality through education.

First MSD's are both functional and effective and are approved by the EPA.

DEQ Response: DEQ agrees that MSDs, when operated in accordance with regulation and proper maintenance, can effectively reduce bacteria counts in effluent. However, there are areas which, due to the natural condition of the waterbody, require more stringent regulations in order to protect water quality. Virginia DEQ believes that Farnham and Lancaster Creeks require the NDZ designation. Should EPA agree, boats may utilize their MSDs outside of the NDZ boundaries. In addition, DEQ has added an exclusion to the revised draft application for boats that have =3' draught requirements. Boats meeting the exclusion may operate their MSD within or outside of the NDZ area.

Where as they like any piece of equipment can fail, when you consider the potential failure points, power and equipment, there are fewer than potential pump out failure points which include pump out equipment, pump to holding point, piping, septic systems, pump to haul and hauling to name some.

DEQ Response: Whelan's Marina meets compliance requirements of the VDH Marina program. The facility is inspected on a yearly basis. While DEQ respects your comment, it could as easily be made in regards to the use of an MSD device. Unless you are sampling the effluent from the MSD, the operator is unable to know the effective bacteria treatment. The MSD devices utilized in the study by EPA were new systems operated under laboratory conditions. Longer term field trials would likely render variable results above and below those reported. Routine maintenance of MSDs and performance inspections are not currently required in Virginia and are generally the responsibility of the boater. As

a result, performance efficiency could vary. There are a number of variables that influence performance and efficiency of an MSD, including stability and voltage of electric current, water salinity (MSDs are not for use in freshwater and require salinity additives in brackish water), amount of pumping required to move waste through treatment tanks, amount of time waste is left in tanks b/w treatments, quantity of waste treated, frequency of system maintenance, as well as the competency of operator. In the case of a spill by the pump-out operator or pump-and-haul, and the "accident", should it be to the ground surface, can be mitigated before the waste reaches the waterway.

Lastly please consider the boater psychology with respect to the pump outs. It is difficult to determine when a holding tank my require pump out; pump out locations are often not accessible when needed or not operational or manned, weather conditions can seriously effect access to pump out facilities, many boats still do not have holding tanks, pump out facilities funded by VDEQ grants can not be used by commercial vessels (watermen?). Lastly it is very easy to discharge overboard. MDS's are significantly easier to use (automatic in most cases), meet EPA standards and are installed by boaters willing to spend their money to be good environmental citizens. Certainly boaters can be forced to use pump outs by large fines and significantly increased enforcement (if possible in these tight budget times), but why not support those willing to do the " Right Thing ".

DEQ Response: DEQ's NDZ program seeks to balance water quality improvement with the cost and difficulty in addressing discharge of sewage waste from boats, particularly those with older model MSDs. NDZs can be a useful tool when additional protection of waterways is necessary to prevent further degradation of water quality or valuable resources. DEQ and the Northern Neck PDC utilized *"Protecting Coastal Waters from Vessel and Marina Discharges: A Guide for State and Local Officials. Volume I. Establishing No Discharge Areas under Section 312 of the Clean Water Act. August 1994. EPA 842-B-94-004"*, which includes a calculator for determining the number of pump-out and dump stations necessary to service peak-demand, along with conservative boat estimates, and conservative hours of operation by Whelan's Marina (included in the calculation) and Garret's Marina (not included in the calculation but provided as an alternative pump-out location). Whelan's Marina satisfies the requirement of a single pump-out and dump-station. Garrett's Marina was included as an alternative should Whelan's Marina not be available for use. In addition, boats with = 3' draught may operate their MSD (which are in compliance with 33 CFR Part 159) within waters outside of any approved NDZ waterway. Workboats would likely fit this criterion. While preventing illicit discharges has and will continue to be a challenge, enforcement of the NDZ is an effective watershed stewardship awareness tool which can prevent illegal dumping and prevent additional discharges from MSDs in sensitive or impaired waterbodies. People have the obligation to make the responsible choice. Education and watershed stewardship, which is part of a NDZ designation, increases the likelihood that boaters will make the choice to protect water quality. There will very likely be a percentage of boaters that illegally discharge, regardless of the presence or absence of a NDZ. Some boaters will view any regulation as an inconvenience and will be unwilling to observe discharge prohibition regardless of the severity of impairment to water quality or

aquatic resources. DEQ believes that NDZs are the right thing to protect the valuable resources of these waterbodies and will be an effective means of reducing bacteria pollution.