

**APPLICATION**  
**for a State-Designated**  
**No Discharge Zone**  
**in the City of Annapolis and**  
**Anne Arundel County,**  
**Maryland**  
**under Clean Water Act §312(f)(3)**

5 July 2019

Prepared by:



<https://severnriver.org/>



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## Preface

The Back Creek Conservancy prepared both two previous drafts of this application in response to resolutions calling for no discharge zones by the Annapolis Environmental Commission (November 2014), the Anne Arundel Maritime Industry Advisory Board (December 2016), and the Severn River Commission (January 2017). All three are volunteer citizens advisory bodies with no direct implementation authority.

To initiate the application, the Back Creek Conservancy engaged Tyler Domanski, a 2016 summer intern, to prepare a feasibility study for a no discharge zone application. Based on his report, the Conservancy organized a consultative roundtable at Port Annapolis Marina on 15 December 2016, chaired by Steuart and Hamilton Chaney, which confirmed the feasibility of a no discharge zone application. A follow-up roundtable in July set the format based on EPA guidance and the basic approach as a positive strategy to promote clean boating, with less emphasis on enforcing a new environmental regulation. A final consultative roundtable in November began the drafting of the application.

The Conservancy's 2017 fundraising launched major corporate sponsorship by the Brick Companies Foundation, Herrington Harbour Marinas, and the Eastport Yacht Center. A second round of fundraising, led by William J. Kardash and Charles R. Kreter, fulfilled the initial financial goal.

Research and drafting of the application took place from November 2017 to February 2018, led by David Read Barker along with Lara Mulvaney, GIS Specialist, and Grace B. Stewart, Program Assistant.

In response to concerns among maritime businesses about the economic impact of no discharge zones, the Back Creek Conservancy brought the harbormasters of Newport, RI (Timothy Mills) and Chatham, MA (Stuart Smith) to Annapolis on 7 February 2018. At a public meeting for maritime businesses, hosted by Annapolis Mayor Gavin Buckley and facilitated by Chesapeake Legal Alliance Executive Director Jacqueline Guild, the harbormasters described their positive experiences.

The first draft of this application was circulated for comment on 23 February 2018 with written and oral comments received from several interested parties.

Based on the comments, a revised draft application dated 28 June 2018 was circulated to Anne Arundel County, and the City of Annapolis, resulting in resolution 31-18 by the County Council in support of the application and resolution 47-18 by the City Council expressing the same support.

At the end of 2018, the Back Creek Conservancy consolidated with the Severn River Association, which now includes the establishment of this No Discharge Zone in its mission and carries on the role of applicant for its designation.

A third round of comments has resulted in this draft of 5 July 2019.

**DRAFT FOR ILLUSTRATIVE PURPOSES ONLY**

**Anne Arundel County**

**City of Annapolis**

**Letter of Endorsement for Severn River Association’s  
Application for a State-Designated No Discharge Zone  
Under the Clean Water Act §312(f)(3)**

**WHEREAS** the County Council of Anne Arundel County passed Resolution 31-18 on September 4, 2018 in support of the establishment of a No Discharge Zone, and

**WHEREAS** the City Council of the City of Annapolis passed Resolution 47-18 in support of the same No Discharge Zone,

we now fully endorse the application of the Severn River Association.

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**Stuart Pittman**  
County Executive, Anne Arundel County

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**Gavin Buckley**  
Mayor, City of Annapolis



## 1.0 Greater Protection and Enhancement Certification

Anne Arundel County, Maryland sits on the Coastal Plain that forms the upper western shore of the Chesapeake Bay. The highest elevation in the county is less than 300 feet; the terrain is deeply incised by rivers, bays, and creeks that cumulatively create more than 533 miles of shoreline. This topography has supported a long history of boating, highlighted by the establishment in 1845 of the U.S. Naval Academy in the county seat and state capital, Annapolis, along with active centers of boat-building, fishing, crabbing, and oystering from the earliest settlements into the 1980s. In recent decades, commercial vessels have largely given way to so much recreational boating that Annapolis is well known as “The Nation’s Sailing Capital.” The Annapolis sailboat and powerboat shows, held annually in October since 1970, are the largest in-the-water boat shows in the United States. The 2017 *Portbook*<sup>1</sup> lists 96 recreational boating businesses in Anne Arundel County; several more support and depend on recreational crabbing and fishing.

Anne Arundel County is bounded on the north by the Patapsco River, on which the Port of Baltimore is located. The county is incised by five significant rivers—the Magothy, Severn, South, Rhode, and West—and by two bays—Whitehall and Herring. A combination of intense suburban development, relatively shallow water depths, and limited tidal range makes these water bodies among the most seriously impaired in the Chesapeake Bay.

This application draws authoritative environmental information about the Chesapeake Bay from three sources: the Maryland Department of the Environment, the Chesapeake Bay Foundation, and the University of Maryland Center for Environmental Science.

The 2016 *Integrated Impairment Report*<sup>4</sup> of the Maryland Department of the Environment offers important information on the impairment status within each basin.

Rhode River basin, Cadle Creek, and Bear Neck Creek were impaired by fecal coliform. In the West River basin, fecal coliform, sulfates, and PCB in fish tissue impaired the waterways. Fecal coliform still impaired Parish Creek, specifically.

The South River basin was impaired by fecal coliform, PCB in fish tissue, chlorides, and the lack of a riparian buffer. Specifically, Duvall Creek, Selby Bay, and Ramsey Lake were all impaired by fecal coliform while the Annapolis Landing beach was impaired by *enterococcus*.

The Magothy River showed impairment by fecal coliform, PCB in fish tissue, and chlorides. Specifically, Tar Cove, Deep Creek, and Forked Creek were all impaired by fecal coliform.

While marine sanitation devices (MSDs) lower fecal coliform levels, they do not eliminate this bacteria and fecal coliform remains an issue for many places within each basin. A no discharge zone offers a little help in reducing levels of fecal coliform within these waters. However, no discharge zone designations in Anne Arundel County waters will not be a panacea to reduce fecal coliform levels everywhere since the north shore of the Magothy River, the south shore of the upper Severn River, and the western shore of the West and Rhode rivers are not yet served by county sewerage. Septic systems in various states of functionality possess the possibility of discharging both nutrients and fecal coliform.

Concentrations of PCB in fish tissue remains another common problem for these water bodies, but this contaminant is not related to sewage disposal from boats.

On 30 May 2018, the Chesapeake Bay Foundation released its 2017 Maryland Midpoint Assessment, accessible at [www.cbf.org/how-we-save-the-bay/chesapeake.../2017-maryland-midpoint.html](http://www.cbf.org/how-we-save-the-bay/chesapeake.../2017-maryland-midpoint.html). This midpoint assessment sought to determine whether Maryland is on track to meet its 2025 pollution reduction targets. The major finding was that, “Maryland has achieved its overall 2017 goals for phosphorus and sediment, but still falls short in nitrogen reductions. “Nitrogen and phosphorus pollution from urban and suburban areas and nitrogen pollution from septic systems continue to increase.”

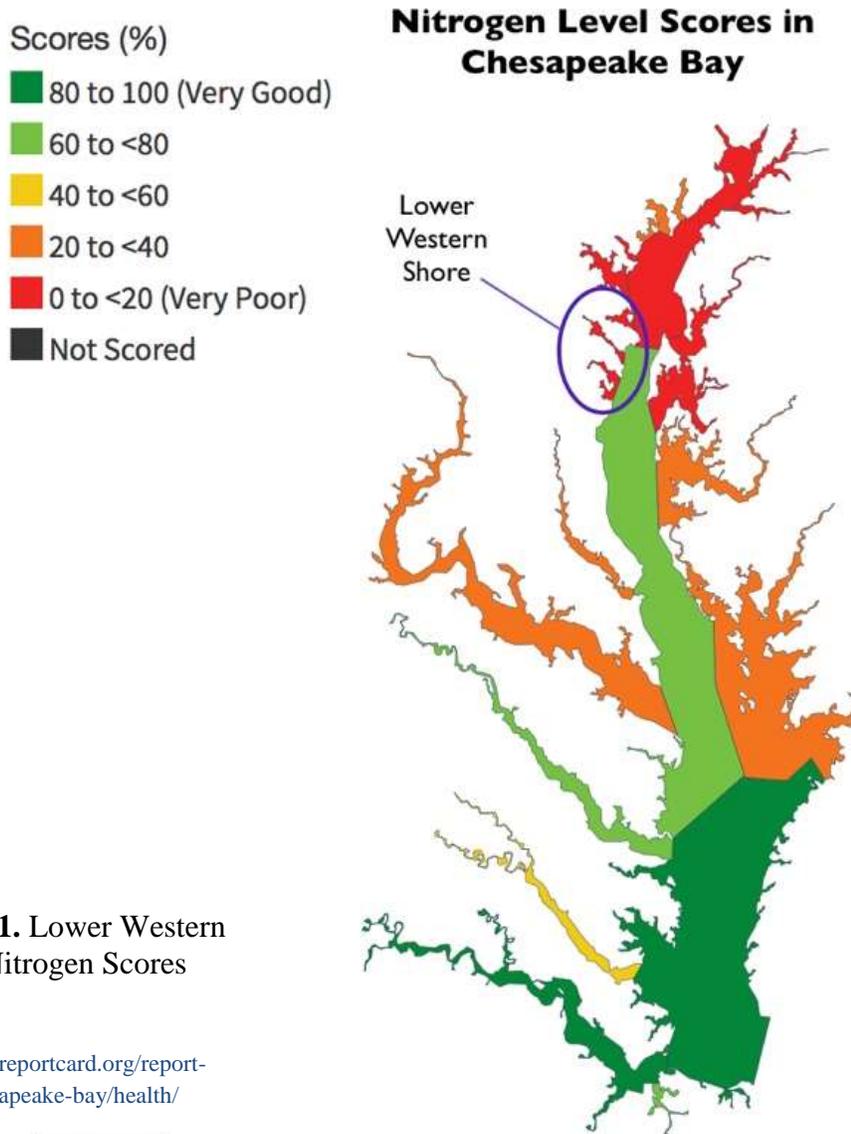
The University of Maryland Center for Environmental Science has developed a sophisticated report card for the health of the Chesapeake Bay, dividing the water body into 12 regions. The “Lower Western Shore” region covers Anne Arundel County and a portion of Calvert County, an area that is nearly identical to the area covered in the application and Herring Bay. The 2017 map of nitrogen levels, reproduced below, shows the Lower Western Shore to be “very poor” and meeting less than 20% of the nitrogen pollution diet’s target (Figure 1).

“No Discharge Zones in Maryland’s Waters,” a 2014 white paper by Donald O’Neill and Donna Morrow at Maryland Department of Natural Resources<sup>2</sup>, is an authoritative survey of this subject.

“Nutrient over-enrichment is the biggest threat to the health of the Chesapeake Bay and Type I MSDs [marine sanitation devices] do little to reduce the amounts of nutrients contained in boat sewage. For this reason, discharges from Type I MSDs can be a problem in sensitive areas of water that are already impacted by other sources of nutrients including poorly flushing areas and areas where vessels tend to congregate.” (p.9)

“The biggest threat to the health of the Chesapeake Bay is nutrient overenrichment. Boat sewage, whether treated or not, contains nutrients. Untreated, or improperly treated, boat sewage also contains disease-causing microorganisms (pathogens), such as bacteria, protozoans, and viruses which can cause illness to swimmers and can contaminate

shellfish beds also causing illness. Treated boat sewage may also contain toxic chemicals that can harm marine life.” (p. 10)



**Figure 1.** Lower Western Shore Nitrogen Scores

*Source:*  
<https://ecoreportcard.org/report-cards/chesapeake-bay/health/>

“Nutrients contained in boat sewage can have a more significant impact on local water quality particularly in areas of water that do not flush well and where boats tend to congregate. Although one discharge from one boat may not add a significant amount of nutrients to the water, the effects of nutrient over-enrichment are cumulative so areas of vessel congregation can be a concern. This is a particular problem in environmentally sensitive areas of water that contain living resources and that may not flush well.” (p. 11)

Table 1.1 shows information from the Chesapeake Bay TMDL<sup>3</sup> for an approximation of the total amount of pounds of nitrogen allowed for areas within the proposed no discharge zone. Over 1

million pounds of nitrogen can be discharged into these waters. So, how much nitrogen would be reduced if the proposed no discharge zone was in place? The following calculations and assumptions explore this idea.

**Table 1.1: Pounds of Nitrogen Allowed Per Year TMDLs<sup>3</sup>**

	<b>Nitrogen (lbs/year)</b>
<b>Magothy</b>	252,398
<b>Severn</b>	428,899
<b>South</b>	249,449
<b>Rhode</b>	52,235
<b>West</b>	37,777
<b>TOTAL</b>	1,020,758

The impaired water quality of Herring Bay prompted an application in 2002 to become the first no discharge zone in Maryland’s portion of the Chesapeake Bay. The proponent of that application was a private business: Herrington Harbour marinas—South, in Rose Haven, and North, in Deale. In the 16 years since the no discharge zone has been in place, Herrington Harbour has consistently reported it to be a great success from the viewpoint of boaters’ satisfaction with cleaner water and of habitat restoration exemplified by the return of Maryland’s iconic species, terrapins and horseshoe crabs, resulting from the no discharge zone and the restoration of shoreline habitats.

The success of the Herring Bay no discharge zone prompted the Chester River Association, a nonprofit organization in Chestertown, Maryland, to prepare an application in 2015 for a no discharge zone designation for the entire Chester River. In part because the river marks the border between Kent and Queen Anne’s counties, both county governments had only limited direct involvement in preparing and promoting the no discharge zone application. The Queen Anne’s County commissioners, however, did submit a strong letter of support for the application.

This current request is the first no discharge zone application in Maryland to be promoted by government entities: the City of Annapolis and Anne Arundel County. Annapolis is the County seat as well as the state capital. The strategy of the application has been to identify all of the water bodies in the County that fulfill the requirements of adequate pump-out and dump station facilities and to limit the no discharge zones to the “interior” waters of the County and not to extend the proposed no discharge zone boundaries into the main stem of the Chesapeake Bay. These limits arise from two considerations. First, the aim of this no discharge zone application is to focus on the rivers, creeks, and coves where recreational boating is most concentrated and where, it is expected, successful no discharge zones will have the most observable effects. And second, the proposed limits correspond to the areas served by existing environmental nonprofit organizations that are currently active in water and habitat quality monitoring, education, and enforcement.

This strategy results in a no discharge zone application that expands the existing Herring Bay no discharge zone to 13 additional water bodies in Anne Arundel County. Excluded from this proposed no discharge zone are the two inter-jurisdictional rivers that border the county: the Patapsco, on the northern boundary, and the Patuxent, to the west.

These 13 water bodies constitute essentially all of the County's waters but one. The exception is Curtis Creek, off the Patapsco River. Curtis Creek is excluded from this application for two reasons. First, although the southern headwaters and upstream portion of the creek is in Anne Arundel County, the juncture of the creek and the river sits in Baltimore City, a geographic feature that would create inter-jurisdictional complications in managing a no discharge zone there. Second, it is by far the most heavily industrialized creek in Anne Arundel County and has relatively limited recreational boating.

Four no discharge zones are proposed on the Patapsco River, the northern border of Anne Arundel County. Three of these are creeks:

1. Stoney Creek, 677 acres
2. Rock Creek, 524 acres
3. Bodkin Creek, 609 acres

The fourth proposed no discharge zone on the Patapsco includes one marina right on the river:

4. Atlantic Marina Resort, 2 acres

Four complete rivers are proposed:

5. Magothy and Little Magothy rivers, 5,879 acres
6. Severn River, 7,497 acres
7. South River, 5,904 acres
8. West and Rhode rivers, 4,370 acres

Finally, four creeks and one bay opening directly onto the Chesapeake Bay are proposed:

9. Podickory Creek, 9 acres
10. Sandy Point/Mezick Ponds, 47 acres
11. Whitehall Bay, 1,599 acres
12. Oyster Cove, 34 acres
13. Fishing Creek, 228 acres

These 13 proposed water bodies total 27,379 acres, which amounts to approximately an eight-fold expansion of the 3,500 acres of the Herring Bay No Discharge Zone initiated in 2002.

## 1.1 Environmental Impact

An assessment of the potential environmental impact of the proposed no discharge zone in Anne Arundel County should prove useful. Would vessel sewage discharge prohibitions make only a trivial contribution in reducing the nutrient load to the Chesapeake Bay, possibly at great cost to boaters, or might they significantly decrease loads? Exploring this question requires pulling together many numbers and making several assumptions.

From the vessel population estimates given in section 3.0, there are 3,228 boats over 40', 9,072 ranging from 26' to 40', and 10,307 vessels from 16' to 26' used in Anne Arundel County. Let us assume that all of the boats over 26' and half of the vessels between 16' and 26' have some sort of onboard toilet.

$$3,228 + 9,072 + (.5 \times 10,307) = 17,454 \text{ boats with toilets}$$

According to a study in 2000 by the Schaefer Center for Public Policy, 88 percent of boats with toilets have holding tanks.

$$17,454 \times .88 = 15,339 \text{ boats with holding tanks}$$

According to a survey conducted in 2000 by the Schaefer Center for Public Policy, 81 percent of boats in Maryland with holding tanks regularly use pump-outs.

$$15,339 \times .81 = 12,441$$

This percentage leaves 2,918 boats in Anne Arundel County with holding tanks that are not regularly pumped out.

$$15,339 - 12,441 = 2,918$$

No reliable information exists about how these estimated 2,918 holding tanks are used or maintained. Presumably, some of them are seldom or never used at all, and some are discharged overboard.

Turning to vessels with Type I marine sanitation devices, there are two sources of estimates. The Marine Trades Association of Maryland estimates the number of these vessels at 500, which can be taken as a broad approximation.

A better estimate comes from Maryland DNR, which conducted a survey on MSDs with 2018 vessel registrations. Of the first 1,661 survey responses, submitted through 23 March 2018, 15 vessels reported having Type I or II systems; 334 have a Type III holding tank. Assuming that the survey responses are representative of the universe of 21,712 vessels registered in Anne Arundel County, a projected 196 vessels have Type I or II systems.

Using this lower estimate,  $2,918 + 196 = 3,114$  boats either have holding tanks that are not pumped out at proper facilities or a Type I or II system that does not treat nitrogen or phosphorus.

Next, we must consider the use that the average vessel receives annually. Here, we assume that for most boaters the season begins in April and runs through October, a period of roughly 28 weeks. We assume that each boat makes a trip every other week, that the average trip involves 2.5 people, and that one-quarter of these people use the onboard MSD for “sewage” purposes.

This calculation results in an “annual use factor” for each vessel of  $28 \times 0.5 \times 2.5 \times 0.25 = 8.75$

Multiplying the number of vessels by the annual use factor results in a new pair of numbers that might be termed “annual boat use.”

Holding tanks	$2,918 \times 8.75 = 25,533$
Type I MSD	$196 \times 8.75 = 1,715$

Let us assume that in a well-functioning no discharge zone, three-fourths of vessel operators with holding tanks who previously discharged directly overboard, and three-fourths of the operators with Type I systems, changed their behavior and used only proper pump-out facilities.

Under this no discharge zone arrangement, the “annual boat use” factor would become

Holding tanks	$25,533 \times 0.75 = 19,149$
Type I MSD	$1,715 \times 0.75 = 1,286$

According to EPA, one person’s daily sewage results in 0.095 pounds of N.

Holding tanks	$19,149 \times 0.025 = 479$ pounds
Type I MSD	$1,286 \times 0.025 = 32$ pounds
<b>Total</b>	<b>511 pounds</b>

According to these calculations, therefore, the proposed no discharge zones in Anne Arundel County might be expected to result in an annual reduction approaching a quarter ton of nitrogen—under one-tenth of one percent of the annual TMDL for these waterbodies (1,023,947 pounds in 2016).

Although all of the assumptions behind this estimate of environmental benefit can be challenged, the net result pointing to roughly a quarter-ton reduction of nutrients is probably not too far off the mark.

Is it worth the effort? Anne Arundel County’s MS4 permit will not award any TMDL reduction credit to this no discharge zone or anything else that takes place directly in the water. On the other hand, recent County work for best management practices is averaging \$3,500 per pound of nitrogen. While recognizing that investments in terrestrial BMPs are completely different from

those for clean boating, a “permanent” 511 pound nitrogen reduction in the proposed no discharge zones would be worth \$1,788,500 if undertaken on land.

## 1.2 Nutrient Reduction Credits

While this application was undergoing the first round of public comment during March and April 2018, the Chesapeake Bay Program (CBP) released the report of the Boat Pump-Out Expert Panel. In 2015, the CBP Wastewater Treatment Workgroup was asked to consider Boat Pump-Out Facilities within no discharge zones as a BMP eligible for nutrient reduction credit within the Phase 6.0 Watershed Model. The proposal recommended the reductions be based upon direct monitoring of nitrogen and phosphorus removal at pump-out facilities from Type I and II MSDs, which would be reported to CBP by the jurisdictions on an annual basis. The workgroup identified several regulatory issues that require further evaluation.

The Boat Pump-Out BMP Expert Panel was requested to identify any regulatory constraints associated with providing nutrient reduction credit for Boat Pump-Out from Type I and II MSDs within the Chesapeake Bay watershed and provide a recommendation on whether to credit the practice in the Phase 6.0 Watershed Model given the identified constraints.

The expert panel’s report recommends that boat discharges be included as a new source in the Bay water quality model. To acknowledge and incentivize good programs that are in place to reduce nutrient loads from boat discharges, the panel recommends that development of a boat pump-out program be approved as a programmatic BMP.

These recommendations have immediate implications for the education and outreach efforts of the City of Annapolis and Anne Arundel County. Section 4.1, Public Education Plan, further covers this topic.

## 2.0 Facilities Information

### 2.1 Maps of Sanitary Waste Reception Facilities

The following pages include an overview map (Map 10) and nine other maps which show the geographic locations of existing pump-out facilities. The facilities open to the public are indicated by a green circle; those that are “private” (only open to slip holders or community residents) are indicated by an orange square. Maps 1 through 9 have accompanying tables that list the marinas depicted. Each table is on the page after its respective map. All of the documented marinas are on at least one of these smaller maps, as well as on the overview map. The maps show only locations of a pump-out facility; they do not indicate if more than one exists at any given location.

Tables A.1.1 and A.1.2 in the appendix provide map codes and contact and location information for marinas with public pump-outs and marinas with private pump-outs respectively. Both tables are organized first by river, from north to south, then by creek alphabetically. The map codes correspond with the information source. If the code is just a number, for example 66, this indicates that Anne Arundel County provided the marina information. The other initials stand for City of Annapolis (COA), Department of Natural Resources (DNR), and Back Creek Conservancy (BCC).

Map 1 shows the four proposed no discharge zones on the Patapsco River (Stoney Creek, Rock Creek, Atlantic Marina Resort, and Bodkin Creek) and the northern portion of the Magothy River.

Map 2 shows the upper Magothy and Severn rivers.

Map 3 shows the southern portion of the Magothy River, including the Little Magothy River, and, directly off the Chesapeake Bay, Podickory Creek, Sandy Point/Mezick Ponds, and Whitehall Bay.

Map 4 shows the City of Annapolis portion of the Severn River and Chesapeake Harbor.

Map 5 shows the upper South River.

Map 6 shows Oyster Creek and Fishing Creek (both directly off the Chesapeake Bay) and the lower South River.

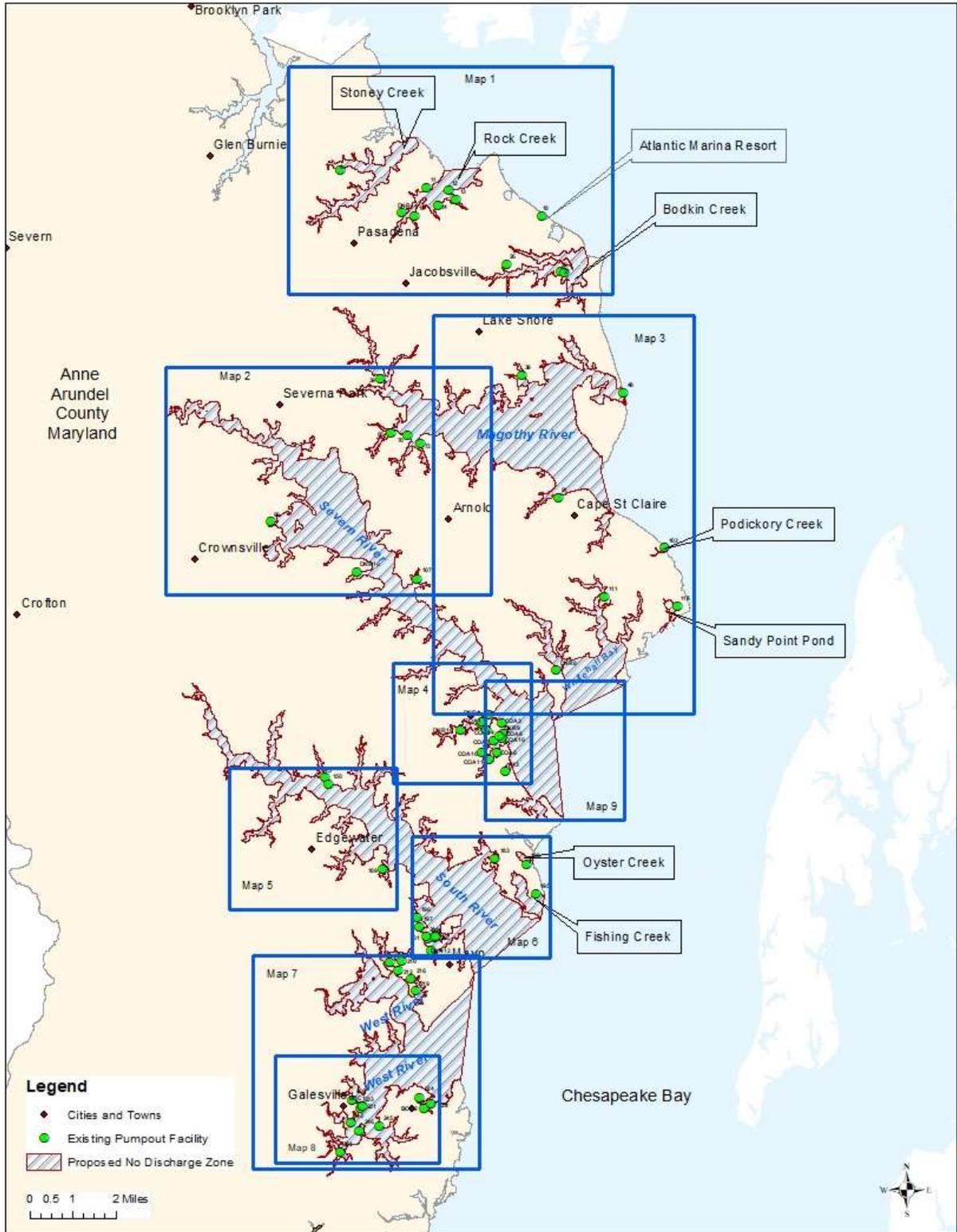
Map 7 shows again the southeastern portion of the South River, the Rhode River, and the outer portion of the West River.

Map 8 shows the West River.

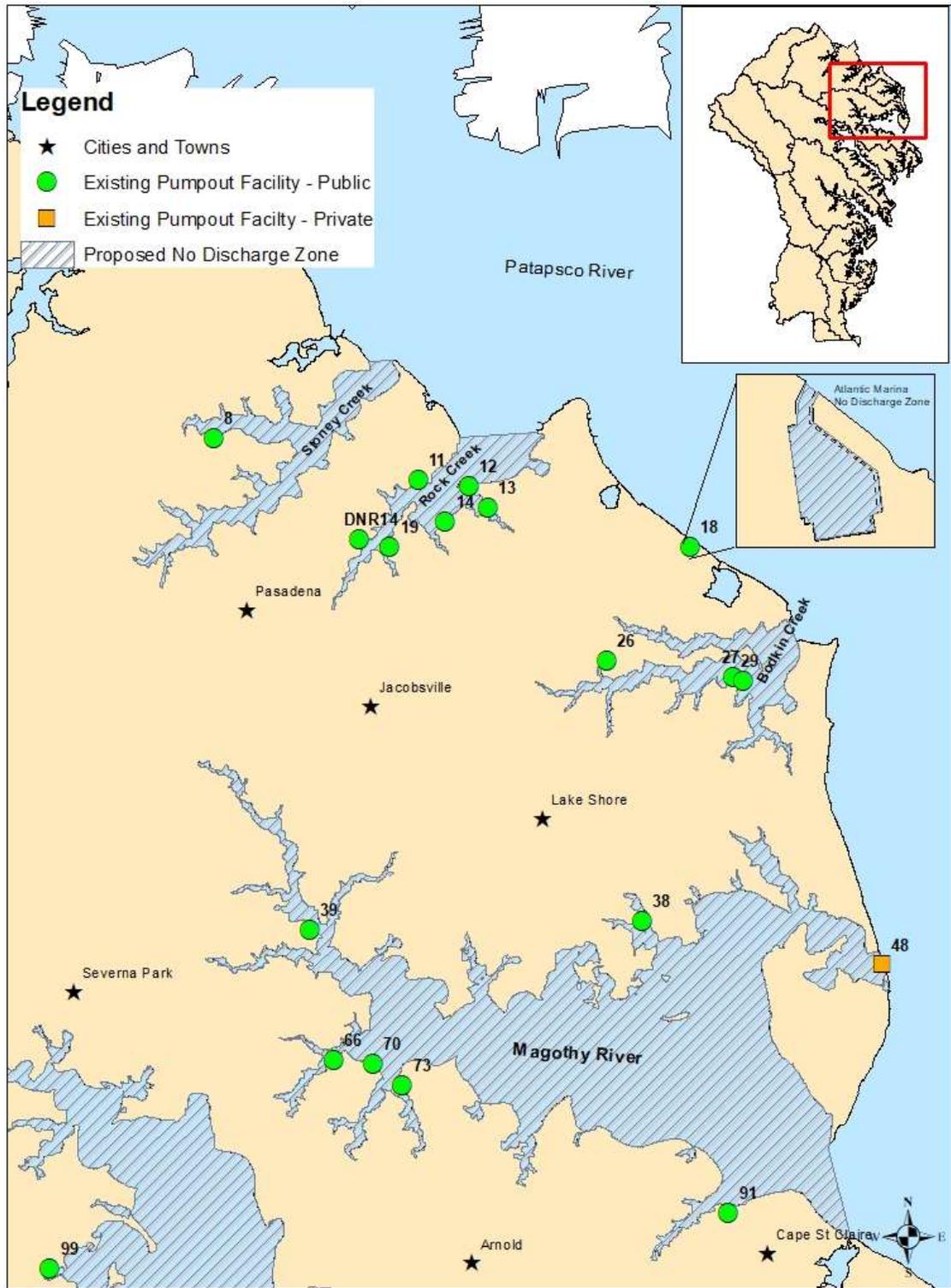
Map 9 shows the outer Severn River.

Map 10 is an index map of the entire proposed discharge zone, showing the locations of maps 1 to 9.

**Map 10: Overview Proposed No Discharge Zones and Existing Pump-out Facilities**



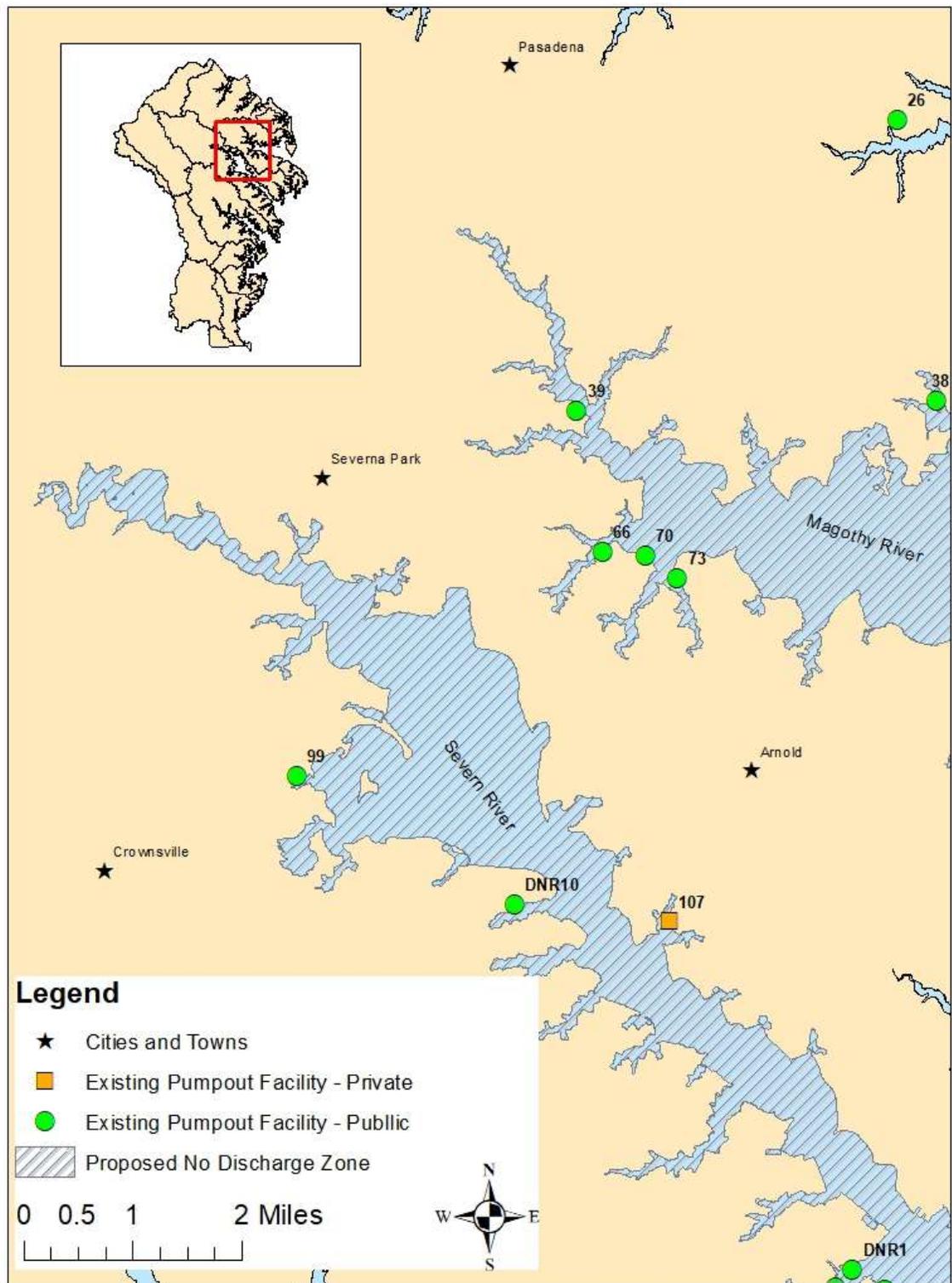
**Map 1: Stoney Creek, Rock Creek, and Bodkin Creek Areas**



## Marinas with Pump-outs: MAP 1

River	Creek	Marina	Map Code	Lat (N)	Long (W)	Phone #	Address	City	Slips	Public/Private	Marina Website
Patapsco	Bodkin	Pleasure Cove Marina	26	39°07'41.4"	76°28'24.3"	410 437 6600	1701 Poplar Ridge Rd	Pasadena	105	Public	<a href="http://www.pleasurecove.com">www.pleasurecove.com</a>
Patapsco	Bodkin	Ventnor Marine Service	27	39°07'39.3"	76°27'01.1"	410 255 4100	8070 Ventor Rd	Pasadena	135	Public	
Patapsco	Bodkin	Hammock Island Marina	29	39°07'34.6"	76°26'53.8"	410 437 1870	8083 Ventor Rd	Pasadena	64	Public	<a href="http://www.hammockisland.com">www.hammockisland.com</a>
Patapsco	River Direct	Atlantic Marina Resort	18	39°08'42.1"	76°27'29.4"	410 437 6926	2010 Knollview Dr	Pasadena	60	Public	<a href="http://www.atlanticmarinaresort.com">www.atlanticmarinaresort.com</a>
Patapsco	Rock	Blake's Bar Harbor Marina	11	39°09'19.3"	76°30'28.8"	410 255 5500	208 Bar Harbor Rd	Pasadena	30	Public	<a href="http://www.blakesbarharbormarina.com">www.blakesbarharbormarina.com</a>
Patapsco	Rock	Maryland Yacht Club	12	39°09'16.0"	76°29'55.3"	410 255 4444	1500 Fairview Beach Rd	Pasadena	144	Public	<a href="http://www.mdyc.org">www.mdyc.org</a>
Patapsco	Rock	Fairview Marina	13	39°09'06.0"	76°29'44.6"	410 437 3400	1575 Fairview Beach Rd	Pasadena	120	Public	<a href="http://www.fairviewmarina.com">www.fairviewmarina.com</a>
Patapsco	Rock	White Rocks Marina	14	39°08'56.9"	76°30'11.4"	410 255 3800	1402 Colony Rd	Pasadena	370	Public	<a href="http://www.whiterocks.com">www.whiterocks.com</a>
Patapsco	Rock	Oak Harbor Marina	19	39°08'44.3"	76°30'48.9"	410 255 4070	1343 Old Water Oak Pt. Rd	Pasadena	100	Public	
Patapsco	Rock	Pasadena Yacht Yard (PYY marine)	DNR14	39°08'47.7"	76°31'07.2"	410 255 1771	1130 Pasadena Yacht Yard Rd	Pasadena	50	Public	<a href="http://www.pyy.com">www.pyy.com</a>
Patapsco	Stoney	Nabbs Creek Marina	8	39°09'43.8"	76°32'45.5"	443 354 1918	864 Nabbs Creek Rd	Glen Burnie	120	Private	<a href="http://www.nabbscreekmarina.com">www.nabbscreekmarina.com</a>
Magothy	Cypress	Cypress Marine, Inc.	66	39°04'18.6"	76°31'27.0"	410 647 7940	730 Cypress Rd	Severna Park	40	Public	<a href="http://www.cypressmarine.net">www.cypressmarine.net</a>
Magothy	Cypress	Magothy Marina, Inc.	70	39°04'18.4"	76°31'07.1"	410 647 2356	360 Magothy Rd	Severna Park	182	Public	<a href="http://www.magothymarina.com/index.html">www.magothymarina.com/index.html</a>
Magothy	Gray's	Atlantic Marina on the Magothy	38	39°05'31.1"	76°28'02.8"	410 360 2500	487 New York Ave	Pasadena	48	Public	<a href="http://www.atlanticmarinaresort.com">www.atlanticmarinaresort.com</a>
Magothy	Magothy Narf	Gibson Island Marina	48	39°05'05.6"	76°25'53.3"	410 255 7632	420 The Causeway	Gibson Island	77	Private	<a href="http://www.gibsonisland.com/club/yacht">www.gibsonisland.com/club/yacht</a>
Magothy	Mill	Ferry Point Marina and Yachtyard	73	39°04'04.5"	76°30'41.5"	410 544 6368	700 Mill Creek Rd	Arnold	100	Public	<a href="http://www.ferrypointmarina.com">www.ferrypointmarina.com</a>
Magothy	River Direct	Hamilton Harbour Marina and Boatworks	39	39°05'26.1"	76°31'43.1"	410 647 0733	368 North Dr	Severna Park	20	Public	<a href="http://www.hamiltonharbourmarina.net">www.hamiltonharbourmarina.net</a>

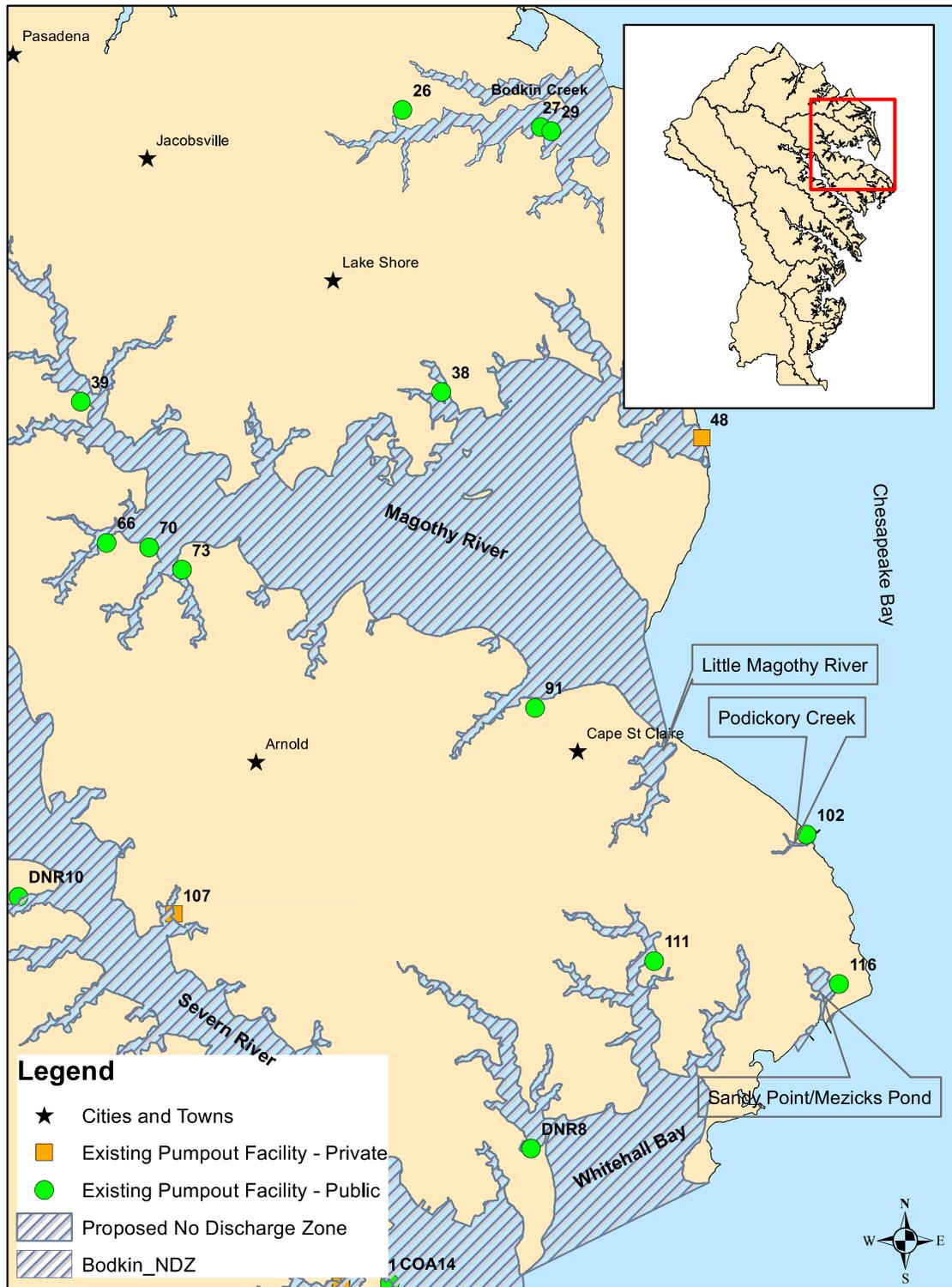
Map 2: Upper Magothy and Severn Rivers



## Marinas with Pump-outs: MAP 2

River	Creek	Marina	Map Code	Lat (N)	Long (W)	Phone #	Address	City	Slips	Pubic/Private	Marina Website
Magothy	Cypress	Cypress Marine, Inc.	66	39°04'18.6"	76°31'27.0"	410 647 7940	730 Cypress Rd	Severna Park	40	Public	<a href="http://www.cypressmarine.net">www.cypressmarine.net</a>
Magothy	Cypress	Magothy Marina, Inc.	70	39°04'18.4"	76°31'07.1"	410 647 2356	360 Magothy Rd	Severna Park	182	Public	<a href="http://www.magothymarina.com/index.html">www.magothymarina.com/index.html</a>
Magothy	Gray's	Atlantic Marina on the Magothy	38	39°05'31.1"	76°28'02.8"	410 360 2500	487 New York Ave	Pasadena	48	Public	<a href="http://www.atlanticmarinaresort.com">www.atlanticmarinaresort.com</a>
Magothy	Mill	Ferry Point Marina and Yachtyard	73	39°04'04.5"	76°30'41.5"	410 544 6368	700 Mill Creek Rd	Arnold	100	Public	<a href="http://www.ferrypointmarina.com">www.ferrypointmarina.com</a>
Magothy	River Direct	Hamilton Harbour Marina and Boatworks	39	39°05'26.1"	76°31'43.1"	410 647 0733	368 North Dr	Severna Park	20	Public	<a href="http://www.hamiltonharbourmarina.net">www.hamiltonharbourmarina.net</a>
Severn	Brewer	Little John Marina	DNR10	39°01'39.8"	76°32'37.9"	410 841 6497	134 Sherwood Forest Rd	Annapolis	0	Private	
Severn	Browns Cove	Smith's Marina	99	39°02'34.5"	76°34'33.2"	410 923 3444	529 Ridgely Rd	Crownsville	60	Public	<a href="http://www.smithsmarina.com">www.smithsmarina.com</a>
Severn	Chase	Pines OTS CyM	107	39°01'37.1"	76°30'18.6"		PO Box #19	Arnold	3	Private	<a href="http://www.pinesonthesevern.org">www.pinesonthesevern.org</a>

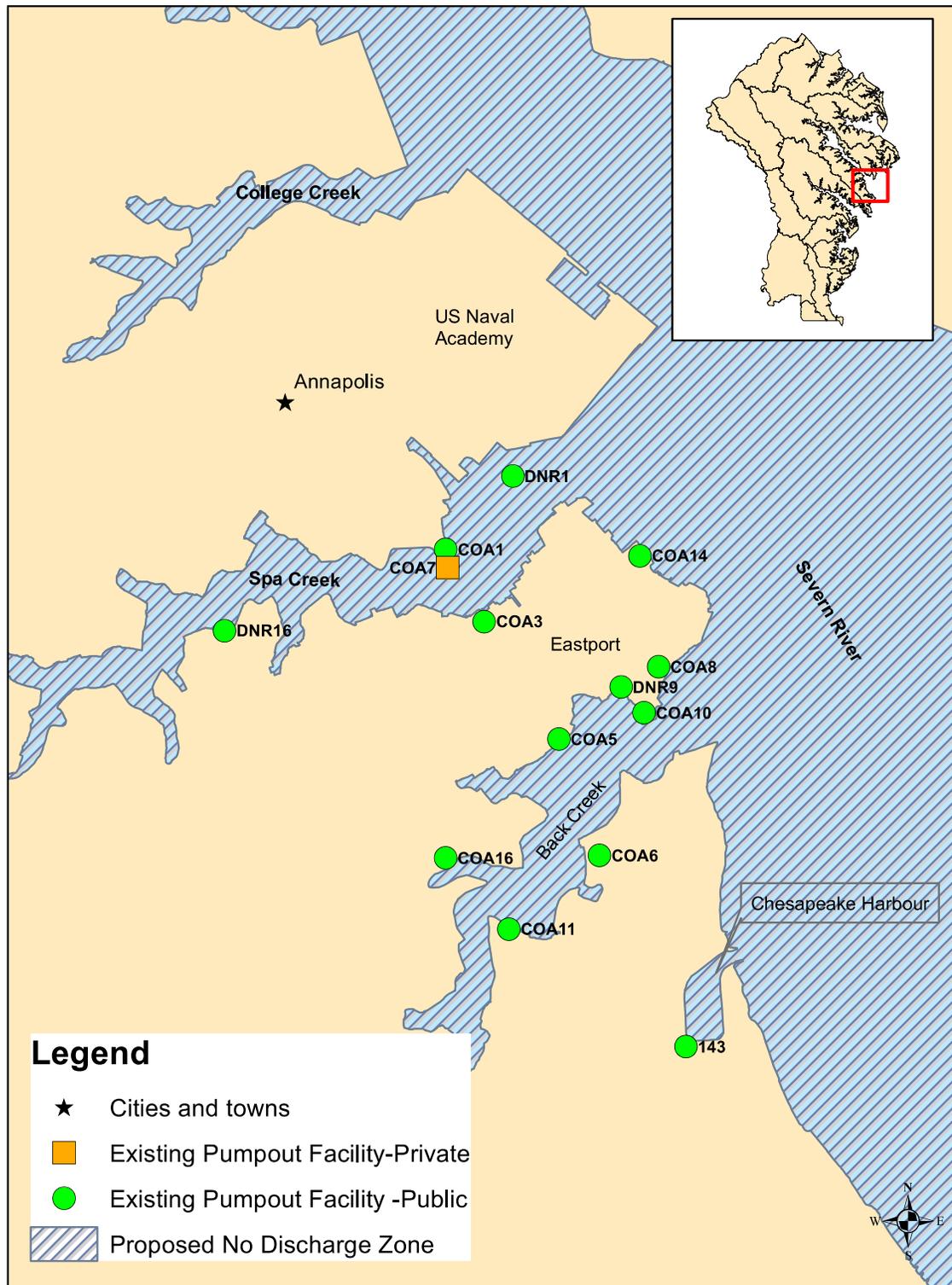
**Map 3: Magothy River, Little Magothy River and Whitehall Bay**



### Marinas with Pump-outs: MAP 3

River	Creek	Marina	Map Code	Lat (N)	Long (W)	Phone #	Address	City	Slips	Public/Private	Marina Website
Magothy	Cypress	Cypress Marine, Inc.	66	39°04'18.6"	76°31'27.0"	410 647 7940	730 Cypress Rd	Severna Park	40	Public	<a href="http://www.cypressmarine.net">www.cypressmarine.net</a>
Magothy	Cypress	Magothy Marina, Inc.	70	39°04'18.4"	76°31'07.1"	410 647 2356	360 Magothy Rd	Severna Park	182	Public	<a href="http://www.magothymarina.com/index.html">www.magothymarina.com/index.html</a>
Magothy	Deep	Fairwinds Marina	91	39°02'59.1"	76°27'07.9"	410 974 0758	1000 Fairwinds Dr	Annapolis	100	Public	<a href="http://www.fairwindsmarina.com">www.fairwindsmarina.com</a>
Magothy	Gray's	Atlantic Marina on the Magothy	38	39°05'31.1"	76°28'02.8"	410 360 2500	487 New York Ave	Pasadena	48	Public	<a href="http://www.atlanticmarinaresort.com">www.atlanticmarinaresort.com</a>
Magothy	Magothy Nar	Gibson Island Marina	48	39°05'05.6"	76°25'53.3"	410 255 7632	420 The Causeway	Gibson Island	77	Private	<a href="http://www.gibsonisland.com/club/yacht">www.gibsonisland.com/club/yacht</a>
Magothy	Mill	Ferry Point Marina and Yachtyard	73	39°04'04.5"	76°30'41.5"	410 544 6368	700 Mill Creek Rd	Arnold	100	Public	<a href="http://www.ferrypointmarina.com">www.ferrypointmarina.com</a>
Magothy	Podickory	Podickory Point Yacht and Beach Club	102	39°01'58.1"	76°24'22.4"	410 757 8000	2116 Bay Front Terrace	Annapolis	120	Public	<a href="http://www.podickorypoint.com">www.podickorypoint.com</a>
Magothy	River Direct	Hamilton Harbour Marina and Boatworks	39	39°05'26.1"	76°31'43.1"	410 647 0733	368 North Dr	Severna Park	20	Public	<a href="http://www.hamiltonharbourmarina.net">www.hamiltonharbourmarina.net</a>
Severn	Mill	John L. Dunning Memorial Pier	DNR8	38°59'22.8"	76°27'08.9"	410 293 3731	140 Hooper High Road	Annapolis	32	Public	<a href="http://www.navyvirannapolis.com">www.navyvirannapolis.com</a>
Severn	River Direct	Sandy Point Marina	116	39°00'52.9"	76°24'07.3"	410 974 2149	800 Revell Hwy	Annapolis	25	Public	<a href="http://www.stateparks.com">www.stateparks.com</a>
Severn	Whitehall	Scandia Marine Center	111	39°00'58.4"	76°25'52.0"	410 643 0037	1656 Homewood Landing Rd	Annapolis	110	Public	<a href="http://www.scandiamarineservices.com">www.scandiamarineservices.com</a>

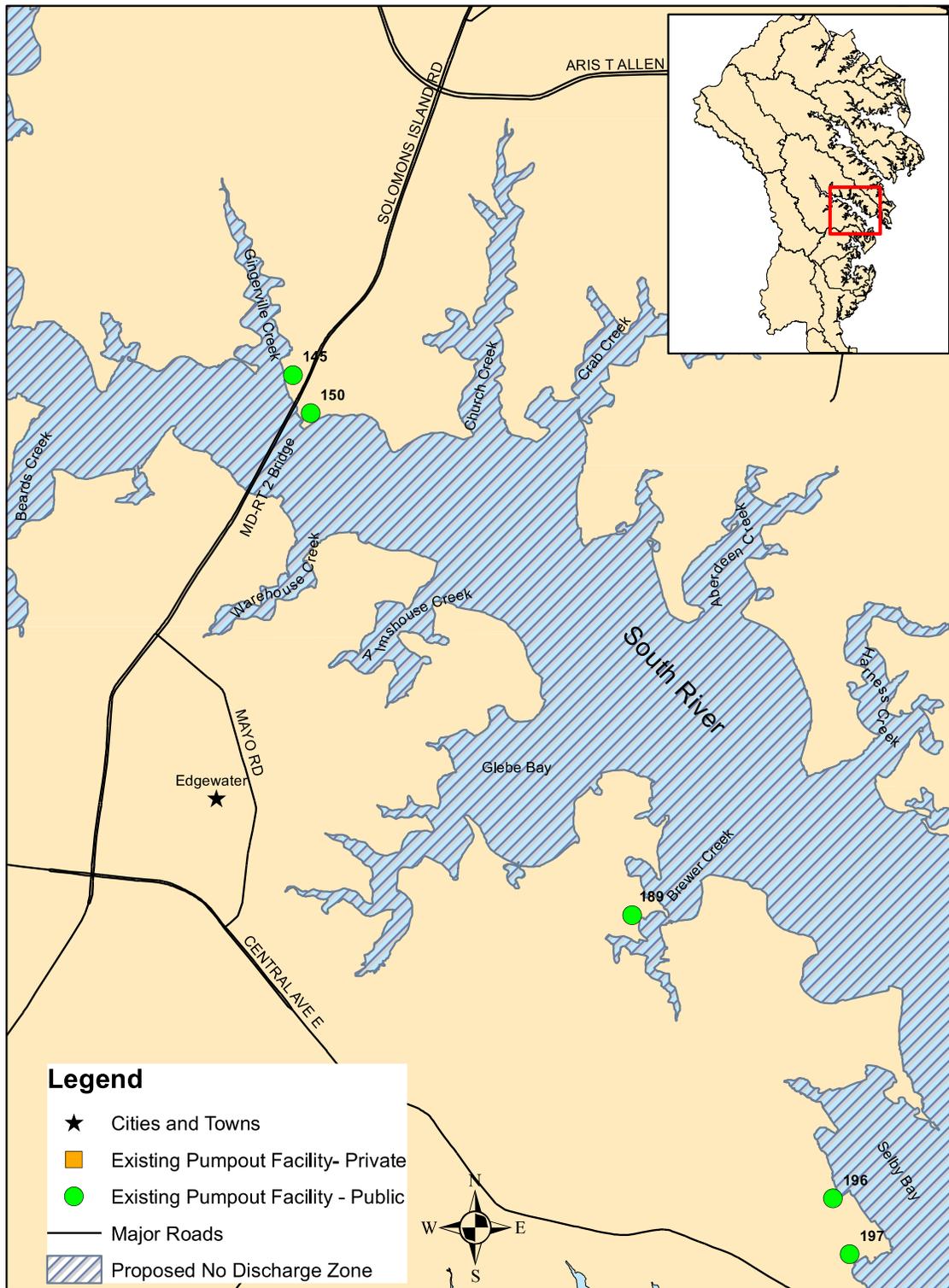
Map 4: Annapolis Area



### Marinas with Pump-outs: MAP 4

River	Creek	Marina	Map Code	Lat (N)	Long (W)	Phone #	Address	City	Slips	Public/Private	Marina Website
Severn	Back	Mears Marina Annapolis	COA5	38°58'04.8"	76°28'53.1"	410 268 8282	519 Chester Ave	Annapolis	186	Public	<a href="http://www.mearsannapolis.com">www.mearsannapolis.com</a>
Severn	Back	Port Annapolis Marina	COA6	38°57'49.0"	76°28'43.6"	410 269 1990	7074 Bembe Beach Rd	Annapolis	225	Public	<a href="http://www.portannapolis.com">www.portannapolis.com</a>
Severn	Back	Horn Point Harbor Marina	COA8	38°58'11.8"	76°28'34.4"	410 263 0550	105 Eastern Ave	Annapolis	56	Public	<a href="http://www.hornpointharbor.com">www.hornpointharbor.com</a>
Severn	Back	Eastport Yacht Center	COA10	38°58'06.1"	76°28'36.7"	410 280 9988	726 2nd St	Annapolis	101	Public	<a href="http://www.eyc.ertem.com">www.eyc.ertem.com</a>
Severn	Back	Bert Jabin Yacht Yard	COA11	38°57'37.2"	76°28'53.2"	410 268 9667	7310 Edgewood Rd	Annapolis	220	Public	<a href="http://www.bjyy.com">www.bjyy.com</a>
Severn	Back	Watergate Pointe Marina	COA16	38°57'48.6"	76°29'07.6"	443 926 1303	655 Americana Dr	Annapolis	160	Public	<a href="http://www.livewatergatemarina.com">www.livewatergatemarina.com</a>
Severn	Back	JPort Marina	DNR9	38°58'09.6"	76°28'39.9"	410 280 8692	213 Eastern Avenue	Annapolis	22	Public	<a href="http://www.lvworlannapolis.com">www.lvworlannapolis.com</a>
Severn	Ego Alley	City of Annapolis Pumpout Boat	DNR1	38°58'39.4"	76°29'09.5"	410 320 6852	1 Dock St	Annapolis	0	Public	<a href="http://www.annapolis.gov">www.annapolis.gov</a>
Severn	River Direct	Chesapeake Harbour Marina	143	38°57'34.3"	76°28'30.8"	410 268 1969	2030 Chesapeake Harbour Dr	Annapolis	198	Public	<a href="http://www.chesapeakeharbourmarina.com">www.chesapeakeharbourmarina.com</a>
Severn	River Direct	Annapolis Maryland Capital Yacht Club	COA14	38°58'24.9"	76°28'37.4"	410 289 5219	16 Chesapeake Landing	Annapolis	82	Public	<a href="http://www.amcyc.com">www.amcyc.com</a>
Severn	Spa	Annapolis Yacht Club	COA7	38°58'37.7"	76°29'05.7"	410 263 9279	2 Compromise St	Annapolis	75	Private	<a href="http://www.annapolisyc.com">www.annapolisyc.com</a>
Severn	Spa	The President Point Marina	DNR16	38°58'17.2"	76°29'37.7"	410 991 9381	President Point Dr	Annapolis	0	Public	
Severn	Spa	The Yacht Basin Co	COA1	38°58'29.7"	76°29'04.1"	410 263 3544	2 Compromise St	Annapolis	107	Public	<a href="http://www.yachtbasin.com">www.yachtbasin.com</a>
Severn	Spa	Annapolis City Marina	COA3	38°58'17.4"	76°29'01.0"	410 268 0660	410 Severn Ave	Annapolis	89	Public	<a href="http://www.annapoliscitymarina.com">www.annapoliscitymarina.com</a>

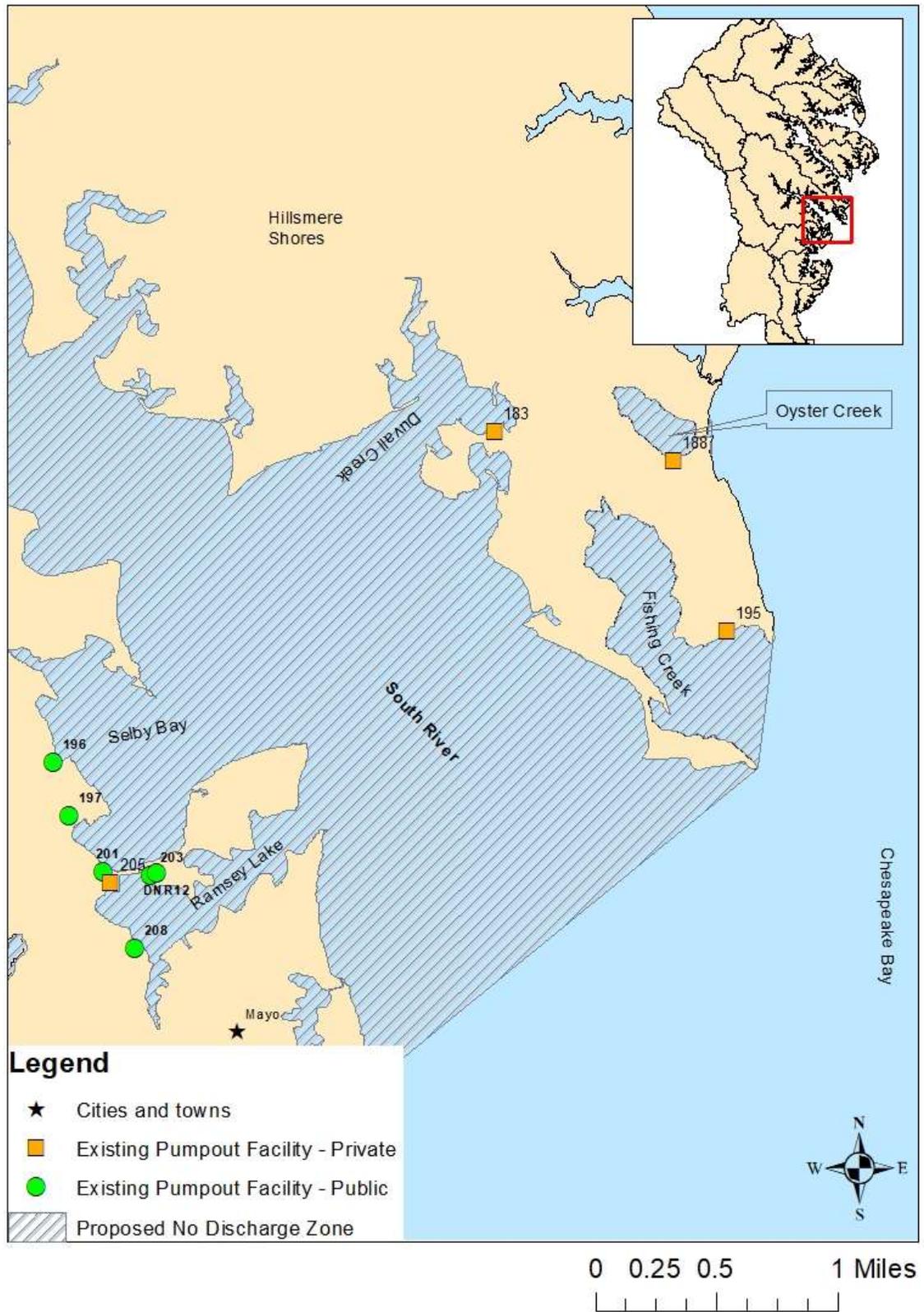
**Map 5: South River Area**



### Marinas with Pump-outs: MAP 5

River	Creek	Marina	Map Code	Lat (N)	Long (W)	Phone #	Address	City	Slips	Public/Private	Marina Website
South	Brewer	Pocahontas Marina	189	38°55'27.4"	76°31'43.5"	410 798 7082	3365 Pocahontas Dr	Edgewater	47	Public	<a href="http://www.pocahontasmarina.com">www.pocahontasmarina.com</a>
South	Gingerville	Oak Grove Marina	145	38°57'22.4"	76°33'10.2"	410 266 6696	2820 Solomons Island Rd	Edgewater	136	Public	<a href="http://www.boatoakgrove.com">www.boatoakgrove.com</a>
South	River Direct	Liberty Yacht Club	150	38°57'11.8"	76°33'09.4"	410 266 5633	64 Old South River Rd	Edgewater	320	Public	<a href="http://www.libertymarina.com">www.libertymarina.com</a>
South	Selby Bay	Selby Bay Yacht Basin	196	38°54'29.0"	76°30'48.9"	410 798 0232	930 Selby Blvd	Edgewater	100	Public	<a href="http://www.selbybaymarina.com">www.selbybaymarina.com</a>
South	Selby Bay	Holiday Pt. Marina #1	197	38°54'16.8"	76°30'41.0"	410 956 2208	3774 Beach Dr Blvd	Edgewater	171	Public	<a href="http://www.holidaypointmarina.com">www.holidaypointmarina.com</a>

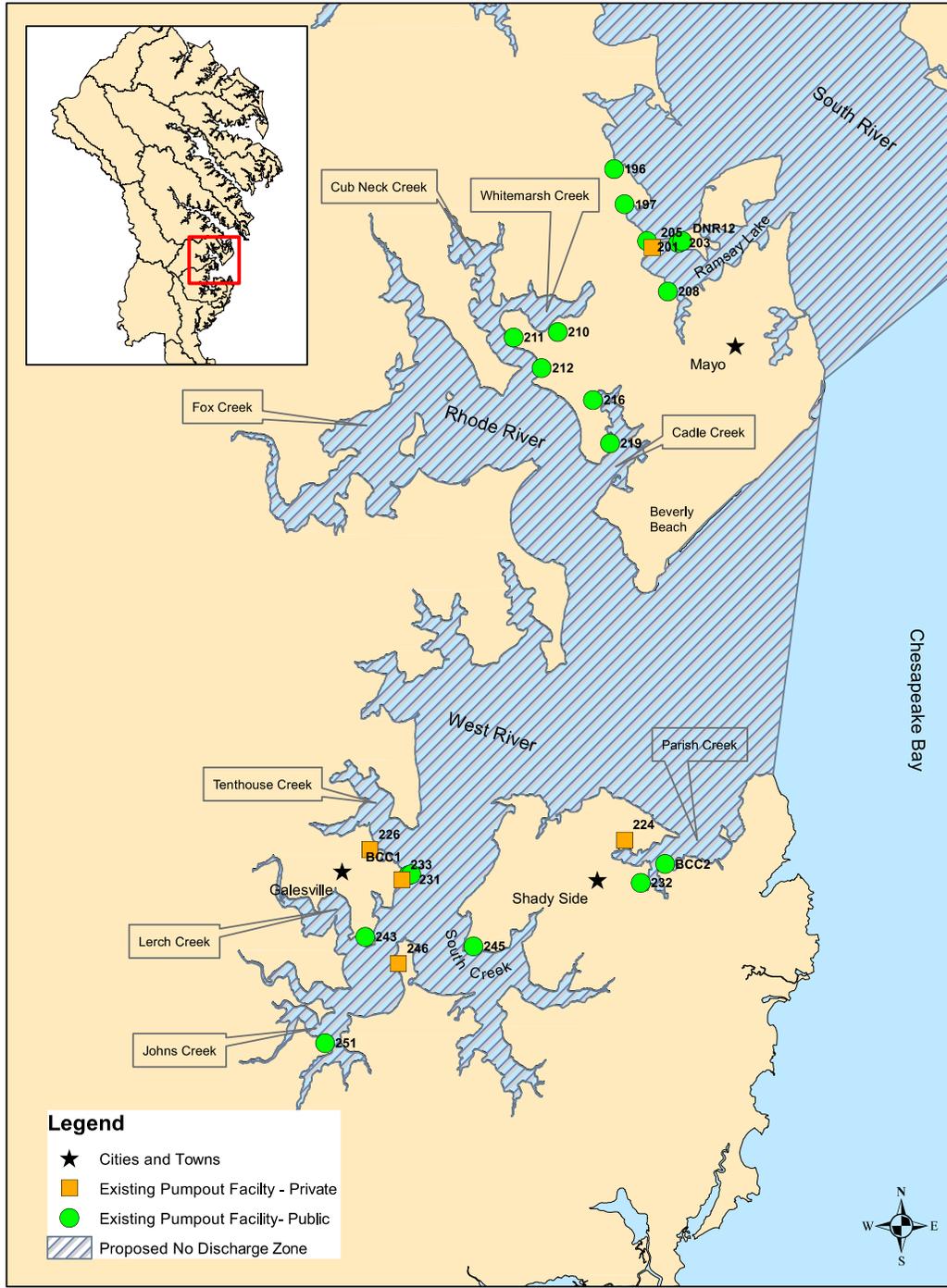
Map 6: South River Area



### Marinas with Pump-outs: MAP 6

River	Creek	Marina	Map Code	Lat (N)	Long (W)	Phone #	Address	City	Slips	Public/Private	Marina Website
South	Duval	Fishing Creek Farms Cym	183	38°55'38.9"	76°28'47.0"		1222 Cherry Tree Lane	Annapolis	26	Private	<a href="http://www.fishingcreekfarm.org">www.fishingcreekfarm.org</a>
South	Fishing	Arundel OTB Cym	195	38°55'08.6"	76°27'48.9"	443 253 0596	PO Box 4665	Annapolis	12	Private	<a href="http://www.arundelonthebay.org">www.arundelonthebay.org</a>
South	Oyster	Oyster Harbor Ramp	188	38°55'33.6"	76°27'56.0"	410 280 8999	PO Box 3174	Annapolis	0	Private	<a href="http://www.oysterharbor.org">www.oysterharbor.org</a>
South	Ramsay Lake	Turkey Point Marina	203	38°54'04.7"	76°30'23.4"	410 798 1369	1107 Turkey Point Rd	Edgewater	100	Public	<a href="http://www.turkeypointmarina.com">www.turkeypointmarina.com</a>
South	Ramsay Lake	Mayo Ridge Marina	208	38°53'49.7"	76°30'29.4"	410 798 1952	1293 Mayo Ridge Rd	Edgewater	68	Public	
South	Ramsay Lake	Norris Marina	DNR12	38°54'04.7"	76°30'22.4"	410 320 1628	1111 Turkey Point Road	Edgewater	55	Public	<a href="http://www.norrismarinaslips.com">www.norrismarinaslips.com</a>
South	Ramsay Lake	South River Marina	205	38°54'02.7"	76°30'35.6"	410 798 6060	1061 Turkey Point Rd	Edgewater	48	Private	<a href="http://www.southernrivermarina.com/home2.htm">www.southernrivermarina.com/home2.htm</a>
South	Selby Bay	Selby Bay Yacht Basin	196	38°54'29.0"	76°30'48.9"	410 798 0232	930 Selby Blvd	Edgewater	100	Public	<a href="http://www.selbybaymarina.com">www.selbybaymarina.com</a>
South	Selby Bay	Holiday Pt. Marina #1	197	38°54'16.8"	76°30'41.0"	410 956 2208	3774 Beach Dr Blvd	Edgewater	171	Public	<a href="http://www.holidaypointmarina.com">www.holidaypointmarina.com</a>
South	Selby Bay	Anchor Yacht Basin	201	38°54'05.2"	76°30'36.1"	410 269 6674	1048 Turkey Pt Rd	Edgewater	110	Public	<a href="http://www.anchoroyachtbasin.com">www.anchoroyachtbasin.com</a>
Rhode	Cadle	Cadle Creek Marina	219	38°52'59.1"	76°30'52.7"	410 798 1915	4159 Cadle Creek Rd	Edgewater	40	Public	
Rhode	Cadle	Casa Rio Marina	216	38°53'13.8"	76°31'00.7"	410 798 4731	4079 Cadle Creek Rd	Edgewater	39	Private	<a href="http://www.casariomarina.com">www.casariomarina.com</a>

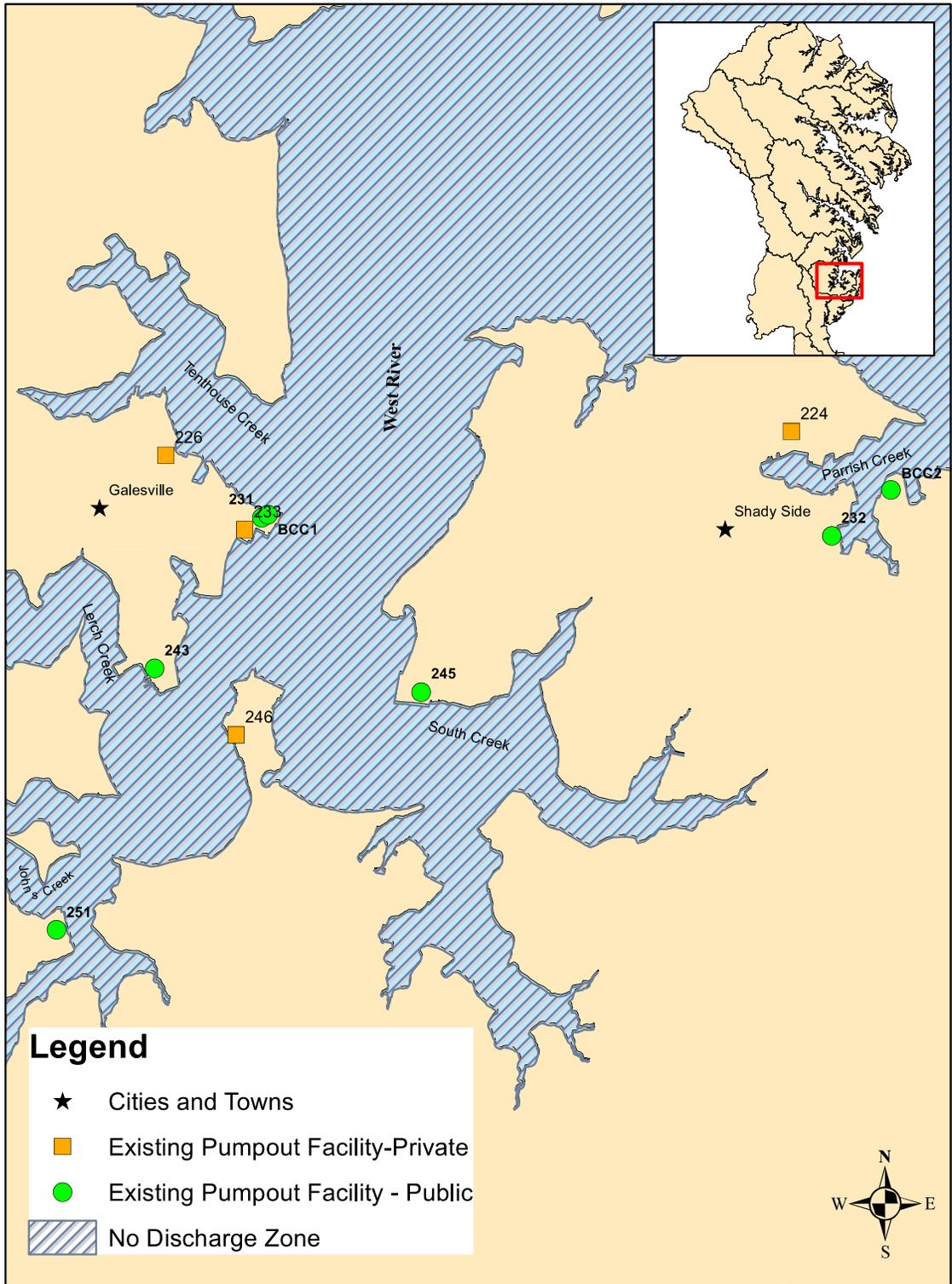
**Map 7: West/Rhode/South**



### Marinas with Pump-outs: MAP 7

River	Creek	Marina	Map Code	Lat (N)	Long (W)	Phone #	Address	City	Slips	Public/Private	Maina Website
South	Ramsay Lake	Turkey Point Marina	203	38°54'04.7"	76°30'23.4"	410 798 1369	1107 Turkey Point Rd	Edgewater	100	Public	<a href="http://www.turkeypointmarina.com">www.turkeypointmarina.com</a>
South	Ramsay Lake	Mayo Ridge Marina	208	38°53'49.7"	76°30'29.4"	410 798 1952	1293 Mayo Ridge Rd	Edgewater	68	Public	
South	Ramsay Lake	Norris Marina	DNR12	38°54'04.7"	76°30'22.4"	410 320 1628	1111 Turkey Point Rd	Edgewater	55	Public	<a href="http://www.norrismarinaslips.com">www.norrismarinaslips.com</a>
South	Ramsay Lake	South River Marina	205	38°54'02.7"	76°30'35.6"	410 798 6060	1061 Turkey Point Rd	Edgewater	48	Private	<a href="http://www.southrivermarina.com/home2.html">www.southrivermarina.com/home2.html</a>
South	Selby Bay	Selby Bay Yacht Marina	196	38°54'29.0"	76°30'48.9"	410 798 0232	930 Selby Blvd	Edgewater	100	Public	<a href="http://www.selbybaymarina.com">www.selbybaymarina.com</a>
South	Selby Bay	Holiday Pt. Marina #1	197	38°54'16.8"	76°30'41.0"	410 956 2208	3774 Beach Dr Blvd	Edgewater	171	Public	<a href="http://www.holidaypointmarina.com">www.holidaypointmarina.com</a>
South	Selby Bay	Anchor Yacht Basin	201	38°54'05.2"	76°30'36.1"	410 269 6674	1048 Turkey Pt Rd	Edgewater	110	Public	<a href="http://www.anchorvachtbasin.com">www.anchorvachtbasin.com</a>
West	Parish	Backyard Boats	232	38°50'36.0"	76°30'41.1"	410 867 4800	4819 Woods Wharf Rd	Shady Side	59	Public	<a href="http://www.backyardboats.com">www.backyardboats.com</a>
West	Parish	Parrish Creek Marina	224	38°50'30.7"	76°30'43.9"	410 867 9550	1442 Ford Rd	Shady Side	141	Private	<a href="http://www.clarkslanding.com">www.clarkslanding.com</a>
West	River Direct	WestRhode Riverkeeper Pumpout Boat	BCC2	38°50'39.3"	76°30'30.8"	443 221 5104	4800 Atwell Rd	Shady Side	0	Public	<a href="http://www.westrhoderiverkeeper.org">www.westrhoderiverkeeper.org</a>
Rhode	Cadle	Cadle Creek Marina	219	38°52'59.1"	76°30'52.7"	410 798 1915	4159 Cadle Creek Rd	Edgewater	40	Public	
Rhode	Cadle	Casa Rio Marina	216	38°53'13.8"	76°31'00.7"	410 798 4731	4079 Cadle Creek Rd	Edgewater	39	Public	<a href="http://www.casariorio.com">www.casariorio.com</a>
Rhode	Whitemarsh	Rhode River Marina	211	38°53'32.1"	76°31'30.2"	410 798 1658	3932 Germantown Rd	Edgewater	108	Public	<a href="http://www.rhoderivermarina.com">www.rhoderivermarina.com</a>
Rhode	Whitemarsh	Holiday Hill Marina	210	38°53'37.0"	76°31'17.6"	410 798 9499	3910 Calawassee Rd	Edgewater	68	Public	<a href="http://www.holidayhillmarina.com">www.holidayhillmarina.com</a>
Rhode	Whitemarsh	Bluewater Marina	212	38°53'21.4"	76°31'20.2"	410 798 6968	1024 Carrs Wharf Rd	Edgewater	52	Public	

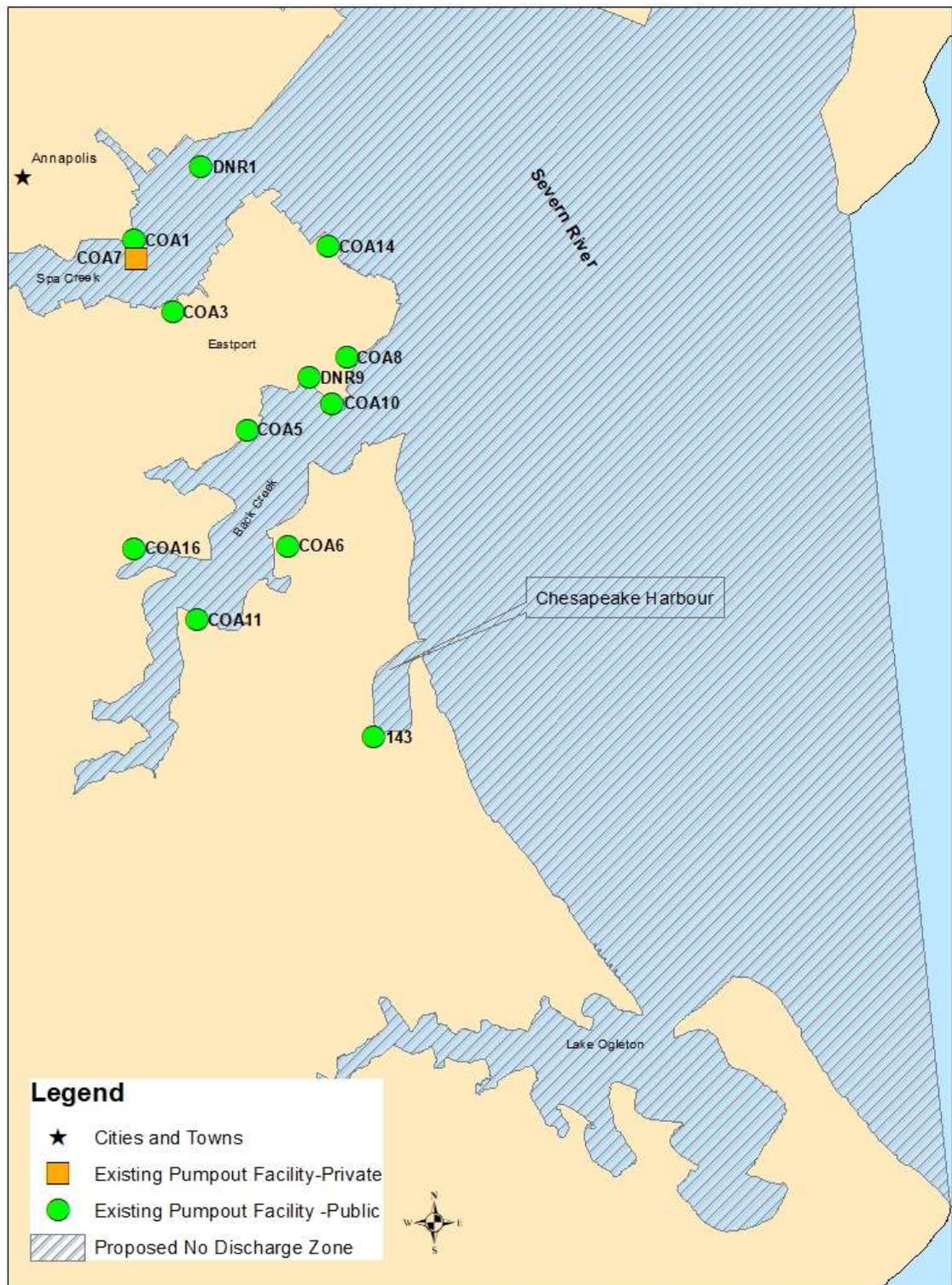
Map 8: West River Area



## Marinas with Pump-outs: MAP 8

River	Creek	Marina	Map Code	Lat (N)	Long (W)	Phone #	Address	City	Slips	Public/Private	Marina Website
West	Johns	Shady Oaks Marina	251	38°49'44.9"	76°32'52.9"	410 867 7700	846 Shady Oaks Rd	West River	45	Public	
West	Parrish	Backyard Boats	232	38°50'36.0"	76°30'41.1"	410 867 4800	4819 Woods Wharf Rd	Shady Side	59	Public	<a href="http://www.backyardboats.com">www.backyardboats.com</a>
West	Parrish	Parrish Creek Marina	224	38°50'30.7"	76°30'43.9"	410 867 9550	1442 Ford Rd	Shady Side	141	Private	<a href="http://www.clarkslandng.com">www.clarkslandng.com</a>
West	River Direct	West River Fuel Dock	BCC1	38°50'35.4"	76°32'10.4"	410 867 1444	4801 Riverside Dr	Galesville	0	Public	
West	River Direct	WestRhode Riverkeeper Pumpout Boat	BCC2	38°50'39.3"	76°30'30.8"	443 221 5104	4800 Atwell Rd	Shady Side	0	Public	<a href="http://www.westrhoderiverkeeper.org">www.westrhoderiverkeeper.org</a>
West	River Direct	Chalk Point Marine	246	38°50'10.3"	76°32'23.0"	410 991 9660	4916 West Chalk Pt Rd	West River	30	Private	<a href="http://www.chalkpointmarinewestriver.com">www.chalkpointmarinewestriver.com</a>
West	River Direct	Pirate's Cove Marina	233	38°50'35.7"	76°32'20.1"	410 867 3600	4817 Riverside Dr	Galesville	86	Private	<a href="http://www.piratescove.md.com/marina.html">www.piratescove.md.com/marina.html</a>
West	South	Chesapeake Yacht Club	245	38°50'15.5"	76°31'52.6"	410 867 1500	4943 Hime Ave	Shady Side	150	Public	<a href="http://www.chesapeakeyachtclub.org">www.chesapeakeyachtclub.org</a>
West	Tenthouse	West River Yacht Harbor	231	38°50'37.5"	76°32'15.9"	301 672 3473	4801 Riverside Dr	Galesville	178	Public	<a href="http://www.westriveryachtclub.org">www.westriveryachtclub.org</a>
West	Tenthouse	Hartge Yacht Harbour	243	38°50'16.0"	76°32'35.3"	443 607 6306	4883 Church Ln	Galesville	250	Public	<a href="http://www.hartgeyachtclub.com">www.hartgeyachtclub.com</a>
West	Tenthouse	Hartge Yacht Yard	226	38°50'53.2"	76°32'36.3"	410 867 2188	4701 Woodfield Rd	Galesville	20	Private	<a href="http://www.hartgeyard.com">www.hartgeyard.com</a>

Map 9: Severn Area



## Marinas with Pump-outs: MAP 9

River	Creek	Marina	Map Code	Lat (N)	Long (W)	Phone #	Address	City	Slips	Public/Private	Maina Website
Severn	Back	Mears Marina Annapolis	COA5	38°58'04.8"	76°28'53.1"	410 268 8282	519 Chester Ave	Annapolis	186	Public	<a href="http://www.mearsannapolis.com">www.mearsannapolis.com</a>
Severn	Back	Port Annapolis Marina	COA6	38°57'49.0"	76°28'43.6"	410 431 0381	7074 Bembé Beach Rd	Annapolis	225	Public	<a href="http://www.portannapolis.com">www.portannapolis.com</a>
Severn	Back	Horn Point Harbor Marina	COA8	38°58'11.8"	76°28'34.4"	410 263 0550	105 Eastern Ave	Annapolis	56	Public	<a href="http://www.hornpointharbour.com">www.hornpointharbour.com</a>
Severn	Back	Eastport Yacht Center	COA10	38°58'06.1"	76°28'36.7"	410 280 9988	726 2nd St	Annapolis	106	Public	<a href="http://www.ecv.ertem.com">www.ecv.ertem.com</a>
Severn	Back	Bert Jabin Yacht Yard	COA11	38°57'37.2"	76°28'53.2"	410 268 9667	7310 Edgewood Rd	Annapolis	220	Public	<a href="http://www.bjvy.com">www.bjvy.com</a>
Severn	Back	Watergate Pointe Marina	COA16	38°57'48.6"	76°29'07.6"	443 926 1303	655 Americana Dr	Annapolis	160	Public	<a href="http://www.livewatergatemarina.com">www.livewatergatemarina.com</a>
Severn	Back	J Port Marina	DNR9	38°58'09.6"	76°28'39.9"	410 280 2040	213 Eastern Ave	Annapolis	22	Public	<a href="http://www.jportannapolis.com">www.jportannapolis.com</a>
Severn	Chesapeake Harbour	Chesapeake Harbour Marina	143	38°57'34.3"	76°28'30.8"	410 500 9059	2030 Chesapeake Harbour Dr	Annapolis	198	Public	<a href="http://www.chesapeakeharbourmarina.com">www.chesapeakeharbourmarina.com</a>
Severn	Ego Alley	City of Annapolis Pumpout Boat	DNR1	38°58'39.4"	76°29'09.5"	410 320 6852	1 Dock St	Annapolis	0	Public	<a href="http://www.annapolis.gov">www.annapolis.gov</a>
Severn	Spa	Annapolis Yacht Club	COA7	38°58'37.7"	76°29'05.7"	410 263 9279	2 Compromise St	Annapolis	75	Private	<a href="http://www.annapolisyac.com">www.annapolisyac.com</a>
Severn	River Direct	Annapolis Maryland Capitol Yacht Club	COA14	38°58'24.9"	76°28'37.4"	410 269 5219	16 Chesapeake Landing	Annapolis	82	Public	<a href="http://www.amcy.com">www.amcy.com</a>
Severn	Spa	The Yacht Basin Co.	COA1	38°58'29.7"	76°29'04.1"	410 263 3544	2 Compromise St	Annapolis	107	Public	<a href="http://www.yachtbasin.com">www.yachtbasin.com</a>
Severn	Spa	Annapolis City Marina	COA3	38°58'17.4"	76°29'01.0"	410 268 0660	410 Severn Ave	Annapolis	89	Public	<a href="http://www.annapoliscitymarina.com">www.annapoliscitymarina.com</a>

## 2.2 Description of Facility Locations and Types

### 1. Stoney Creek

Stoney Creek, off the Patapsco River, is shown on Map 1. The proposed outer limit of the no discharge zone extends from lat. 39.1723°N long. 76.5171°W to lat. 39.1725°N long. 76.5126°W covering an area of 677 acres.

*Public marinas:* Nabbs Creek Marina (8)

This marina is on Anne Arundel County sewerage.

### 2. Rock Creek

Rock Creek, off the Patapsco River, is shown on Map 1. The proposed outer limit of the no discharge zone extends from lat. 39.1614°N long. 76.5004°W to lat. 39.1625°N long. 76.4862°W, covering an area of 524 acres.

*Public marinas:* Blake's Bar Harbor Marina (11), Maryland Yacht Club (12), Fairview Marina (13), White Rocks Marina (14), Oak Harbor Marina (19), and Pasadena Yacht Yard (DNR14)

Nos. 11, 12, 13, 14 and DNR 14 are on Anne Arundel County sewerage; no. 19 uses a septic system.

### 3. Atlantic Marina Resort

Atlantic Marina Resort, off the Patapsco River, is shown on Map 1. The opening of the marina on the Patapsco River is located at lat. 39.1472°N long. 76.4588°W an area of 2 acres. lat. 39.1471°N long 76.4587°W

*Public marinas:* Atlantic Marina Resort (18)

This marina is on septic.

### 4. Bodkin Creek

Bodkin Creek, off the Patapsco River, is shown on Map 1. The proposed outer limit of the no discharge zone extends from lat. 39.1346 °N long. 76.4398°W to lat. 39.1321°N long. 76.4378°W, covering an area of 609 acres.

*Public marinas:* Pleasure Cove Marina (26), Ventnor Marina Service (27), and Hammock Island Marina (29)

All three of these marinas are on septic.

### 5. Magothy and Little Magothy Rivers

The Magothy River is shown in Maps 1, 2 and 3, together proposed as a single no discharge zone with an outer limit that extends from lat. 39.0597°N long. 76.4332°W to lat. 39.0527°N long. 76.4382°W, covering an area of 5,879 acres, of which 5,790 acres are in the Magothy River and 89 acres in the Little Magothy.

*Private marinas:* Gibson Island Marina (48)

*Public marinas:* Atlantic Marina on the Magothy (38), Hamilton Harbor Marina & Boatworks (39), Cypress Marine (66), Magothy Marina (70), Ferry Point Marina and Yacht Yard (73), and Fairwinds Marina (91)

Private marina No. 48 and public marina No. 38 are on septic. Public marinas Nos. 39, 66, 70, 73, and 91 are on sewerage.

## **6. Podickory Creek**

Podickory Creek, directly off the Chesapeake Bay, is shown on Map 3. The proposed outer limit of this no discharge zone extends from lat. 39.0328°N long. 76.4040°W to lat. 39.0317°N long. 76.4048°W, covering an area of 9 acres.

*Public marinas:* Podickory Point Yacht & Beach Club (102)

This marina is on Anne Arundel County sewerage.

## **7. Sandy Point/Mezick Ponds**

Sandy Point/Mezick Ponds, directly off the Chesapeake Bay, is shown on Map 3. The proposed outer limit of the no discharge zone extends from lat. 39.0082°N long. 76.4031°W to lat. 39.0081°N long. 76.4033°W, covering an area of 47 acres.

*Public marina:* Sandy Point Marina (116)

This marina is on sewerage.

## **8. Whitehall Bay**

Whitehall Bay, directly off the Chesapeake Bay, is shown on Map 3. The proposed outer limit of the no discharge zone extends from lat. 39.9748°N long. 76.4547°W to lat. 38.9871°N long. 76.4268°W, covering an area of 1,599 acres.

*Public marinas:* Scandia Marine Center (111) and John L. Dunning Memorial Pier (DNR8)

Both marinas are on sewerage.

## **9. Severn River**

The Severn River is shown on Maps 2, 3, and 4. The proposed outer limit of the no discharge zone extends from lat. 39.9748°W long. 76.4547°N to lat. 39.9411°N long. 76.4502°W, covering an area of 7,497 acres.

### ***Chesapeake Harbour***

*Public marina:* Chesapeake Harbour Marina (143)

### ***Back Creek***

*Public marinas:* Port Annapolis Marina (COA6), Bert Jabin Yacht Yard (COA11), Watergate Pointe Marina (COA16), Mears Marina (COA5), JPort Marina (DNR9), Eastport Yacht Center (COA10), Horn Point Harbor Marina (COA8), Annapolis Maryland Capital Yacht Club (COA14)

### ***Annapolis Harbor***

*Public marinas:* Annapolis City Marina (COA3), The President Point Marina (DNR16), The Yacht Basin Co. (COA1), and City of Annapolis Pump-out Boat (DNR1).

*Private marina:* Annapolis Yacht Club (COA7)

### ***Brewer Creek***

*Private marina:* Little John Marina (DNR10)

### ***Brown's Cove***

*Private marina:* Pines on the Severn (107)

*Public marina:* Smith's Marina (99)

Public marina No. 99 and private marina No. DNR10 are on septic. All others are on sewerage.

## **10. Oyster Creek**

Oyster Creek, directly off the Chesapeake Bay, is shown on Map 6. The proposed outer limit of the no discharge zone extends from lat. 38.9273°N long. 76.4638°W to lat. 38.9272°N long. 76.4633°W, covering an area of 34 acres.

*Private marina:* Oyster Harbor Ramp (188)

This marina is on sewerage.

## **11. Fishing Creek**

Fishing Creek, directly off the Chesapeake Bay, is shown on Map 6. The proposed outer limit of the no discharge zone extends from lat. 38.9147°N long. 76.4590°W to lat. 38.9073°N long. 76.4600°W, covering an area of 228 acres.

*Private marina:* Arundel on the Bay (community marina) (195)

This marina is on sewerage.

## **12. South River**

The South River is shown on maps 5, 6, and 7. The proposed outer limit of the no discharge zone extends from lat. 38.9073°N long. 76.4600°W to lat. 38.4848°N long. 76.4908°W, covering an area of 5,904 acres.

*Private marinas:* Fishing Creek Farms (183) and South River Marina (205)

*Public marinas:* Mayo Ridge Marina (208), Turkey Point Marina (203), Norris Marina (DNR12), Anchor Yacht Basin (201), Holiday Point Marina (197), Selby Bay Yacht Basin (196), Pocahontas Marina (189), Liberty Marina (150), and Oak Grove Marina (145)

All of these marinas are on sewerage.

## **13. West and Rhode Rivers**

The West and the Rhode rivers are shown in maps 7 and 8. These rivers are separate and distinct but meet at their mouths with the Chesapeake Bay and are commonly treated as a single river system. The proposed outer limit of the no discharge zone extends from lat.

38.4848°N long. 76.4908°W to lat. 38.8531°N long. 76.4959°W, covering a combined area of 4,370 acres.

***West River***

*Public marinas:* Casa Rio Marina (216), Rhode River Marina (211), Cadle Creek Marina (219), Bluewater Marina (212), and Holiday Hill Marina (210).

***Rhode River***

*Private marinas:* Parrish Creek Marina (224), Hartge Yacht Yard (226), Chalk Pointe Marine (246), Pirate’s Cove Marina (233)

*Public marinas:* West and Rhode Riverkeeper Pump-out Boat (BCC2), Backyard Boats (232), West River Yacht Harbor (231), Hartge Yacht Harbour (243), Shady Oaks Marina (251), Chesapeake Yacht Club (245), West River Fuel Dock (BCC1)

All are on sewerage.

Of the 74 marinas identified in Anne Arundel County offering pump-out and/or dump station facilities, 56 are identified as “public” and 18 as “private.” The distinction is not entirely clear-cut. In most cases, the private facilities are available only on a restricted basis, such as to residents of a homeowners’ association or slipholders, but in other instances the “private” marinas service transient boats on an *ad hoc* basis. The 18 “private” facilities are recognized as serving private needs, but they are not counted toward meeting adequate pump-out and dump station requirements.

Table 2.2.1 shows what type of pump-out and dump station facilities each public marina offers. The types of pump-out facilities are: stationary, portable, and mobile. None of the marinas had remote-operated, multi-station, pump-out systems. The marina dump stations are contrasted with normal bathrooms, which serve the same purpose, but not as well.

**Table 2.2.1: Marinas with Public Pump-out Facilities**

River	Creek	Marina	Map Code	Portable	Mobile	Stationary	Dump	Restroom
Patapsco	Bodkin	Pleasure Cove Marina	26			1		1
Patapsco	Bodkin	Ventnor Marine Service	27			1		1
Patapsco	Bodkin	Hammock Island Marina	29			1	1	1
Patapsco	River Direct	Atlantic Marina Resort	18			1		1
Patapsco	Rock	Blake's Bar Harbor Marina	11			1		1
Patapsco	Rock	Maryland Yacht Club	12	1		1		1
Patapsco	Rock	Fairview Marina	13		1	1		1
Patapsco	Rock	White Rocks Marina	14			1		1
Patapsco	Rock	Oak Harbour Marina	19			1		1
Patapsco	Rock	Pasadena Yacht Yard (PYY marine)	DNR14			1		1
Patapsco	Stoney	Nabbs Creek Marina	8			1		1
Magothy	Cypress	Cypress Marina, Inc.	66		1			1
Magothy	Cypress	Magothy Marina, Inc.	70			1	1	1
Magothy	Deep	Fairwinds Marina	91			1		1
Magothy	Gray's	Atlantic Marina on the Magothy	38			1		1
Magothy	Mill	Ferry Point Marina and Yachtyard	73			1		1
Magothy	River Direct	Hamilton Harbour Marina and Boatworks	39			1	1	1
Chesapeake Bay	Mezick Ponds	Sandy Point Marina	116			1		1
Chesapeake Bay	Mill	John L. Dunning Memorial Pier	DNR8			1		1
Chesapeake Bay	Podickory	Podickory Point Yacht and Beach Club	102			1	1	1
Chesapeake Bay	Whitehall	Scandia Marine Center	111		1			1
Severn	Back	Mears Marina Annapolis	COA5			1		1
Severn	Back	Port Annapolis Marina	COA6		1	1		1
Severn	Back	Horn Point Harbor Marina	COA8			1		1
Severn	Back	Eastport Yacht Center	COA10			1		1
Severn	Back	Bert Jabin Yacht Yard	COA11		1	1		1
Severn	Back	Watergate Pointe Marina	COA16			1		1
Severn	Back	J Port Marina	DNR9			1		1
Severn	Browns Cove	Smith's Marina	99			1		1
Severn	Chesapeake Harbour	Chesapeake Harbour Marina	143			1	1	1
Severn	Ego Alley	City of Annapolis Pumpout Boat	DNR1		2			
Severn	River Direct	Annapolis Maryland Capitol Yacht Club	COA14			1		1
Severn	Spa	The President Point Marina	DNR16			1	1	
Severn	Spa	The Yacht Basin Co.	COA1		1	2		1
Severn	Spa	Annapolis City Marina	COA3			2	1	1
South	Brewer	Pocahontas Marina	189		1			1
South	Gingerville	Oak Grove Marina	145			1		1
South	Ramsay Lake	Turkey Point Marina	203	1				1
South	Ramsay Lake	Mayo Ridge Marina	208			1	1	1
South	Ramsay Lake	Norris Marina	DNR12			1		1
South	River Direct	Liberty Marina	150		1	1		1
South	Selby Bay	Selby Bay Yacht Marina	196			1	1	1
South	Selby Bay	Holiday Pt. Marina #1	197			1	1	1
South	Selby Bay	Anchor Yacht Basin	201			1		1
West	Johns	Shady Oaks Marina	251			1		1
West	Parish	Backyard Boats	232			1		1
West	River Direct	West River Fuel Dock	BCC1			2		
West	River Direct	WestRhode Riverkeeper Pumpout Boat	BCC2		1			
West	South	Chesapeake Yacht Club	245			1		
West	Tenthouse	West River Yacht Harbour	231	1		1	1	1
West	Tenthouse	Hartge Yacht Harbour	243			1	1	1
Rhode	Cadle	Cadle Creek Marina	219			1		1
Rhode	Cadle	Casa Rio Marina	216			1		1
Rhode	Whitemarsh	Rhode River Marina	211			1		1
Rhode	Whitemarsh	Holiday Hill Marina	210		1	1		1
Rhode	Whitemarsh	Bluewater Marina	212			1		

## 2.3 Facility Operations

Table 2.3.1 summarizes the hours of operation for each marina pump-out, their schedule during the off season if they have one, and the amount they charge per pump-out.

**Table 2.3.1: Public Pump-out Operation Hours and Fees**

River	Creek	Marina	Map Code	Hours Of Operation	Off Season	Fees
Patapsco	Bodkin	Pleasure Cove Marina	26	M-Th 9-6, Fri-Sun 9-8	N	\$5.00
Patapsco	Bodkin	Ventnor Marine Service	27	M-Sun 8-4:30	N	\$5.00
Patapsco	Bodkin	Hammock Island Marina	29	By Appointment	N	\$5.00
Patapsco	River Direct	Atlantic Marina Resort	18	M-Sun (except Tu) 9-5	N	\$5.00
Patapsco	Rock	Blake's Bar Harbor Marina	11	M-Sun 8-6	N	\$5.00
Patapsco	Rock	Maryland Yacht Club	12	M-Fri 8-4	Every Wed	\$5.00
Patapsco	Rock	Fairview Marina	13	M-Fri 8-5, Sat 9-4, Sun 9-12	N	\$5.00
Patapsco	Rock	White Rocks Marina	14	M-Fri 10-3	N	\$5.00
Patapsco	Rock	Oak Harbour Marina	19	M-Fri 8-4	N	\$5.00
Patapsco	Rock	Pasadena Yacht Yard (PYY marine)	DNR14	M-Fri 8-5	N	\$10.00
Patapsco	Stoney	Nabbs Creek Marina	8	Tu-Thur 3-10, Fri 12-12, Sat 11-12, Sun 9-9	N	\$5.00
Magothy	Cypress	Cypress Marina, Inc.	66	M-Th 8:30-4:30, Fri-Sun by Appointment	N	\$50.00
Magothy	Cypress	Magothy Marina, Inc.	70	M-Th 8-6, Fri-Sun 8-8	N	\$10.00
Magothy	Deep	Fairwinds Marina	91	M-Sat 8-8, Sun 8-4:45	N	\$5.00
Magothy	Gray's	Atlantic Marina on the Magothy	38	M-Sun (except Tu) 9-5	N	\$5.00
Magothy	Mill	Ferry Point Marina and Yachtyard	73	M-Sun 8-5	N	Free
Magothy	River Direct	Hamilton Harbour Marina and Boat	39	M-Sun (except Wed) 9-5	N	\$5.00
Chesapeake Bay	Mezick Ponds	Sandy Point Marina	116	M-Sun 8-5	N	Free
Chesapeake Bay	Mill	John L. Dunning Memorial Pier	DNR8	M-Sun 9-5	N	Free
Chesapeake Bay	Podickory	Podickory Point Yacht and Beach Club	102	M-Fri 9-4, Sat-Sun 9-7	N	\$5.00
Chesapeake Bay	Whitehall	Scandia Marine Center	111	M-Fri 8-9, Sat 8:30-12:30	M-Fri 8-4:30	\$5.00
Severn	Back	Mears Marina Annapolis	COA5	M-Sun 8:30-5	N	\$10.00
Severn	Back	Port Annapolis Marina	COA6	M-Th 8-5, Fri-Sun 9-4:30	N	\$5.00
Severn	Back	Horn Point Harbor Marina	COA8	M-Sun 9-5	N	\$5.00
Severn	Back	Eastport Yacht Center	COA10	M-Fri 8-5	By Appointment	\$5.00
Severn	Back	Bert Jabin Yacht Yard	COA11	M-Sun 8-5	N	\$5.00
Severn	Back	Watergate Pointe Marina	COA16	M-Sun 8-5	N	\$5.00
Severn	Back	J Port Marina	DNR9	M-Fri 9-5	N	Free
Severn	Browns Cove	Smith's Marina	99	M-Sun 8-7	M-Fri 8:30-4:30	\$5.00
Severn	Chesapeake Harbour	Chesapeake Harbour Marina	143	M-Fri 8:30-5	N	\$5.00
Severn	Ego Alley	City of Annapolis Pumpout Boat	DNR1	M-Sun 9-5	Sat 9-5, Tu by Appt.	\$5.00
Severn	River Direct	Annapolis Maryland Capitol Yacht Club	COA14	M-Sun 8:30-5	N	Free
Severn	Spa	The President Point Marina	DNR16	M-Sun 8-5	N	Free
Severn	Spa	The Yacht Basin Co.	COA1	M-Sun 7-7	N	\$10.00
Severn	Spa	Annapolis City Marina	COA3	M-Sun 8-8	N	\$5.00
South	Brewer	Pocahontas Marina	189	M-Fri 8:30-5, Sat 8:30-1	N	Free
South	Gingerville	Oak Grove Marina	145	M-Th 10-6, Fri 10-7:30, Sat-Sun 8-7:30	N	\$5.00
South	Ramsay Lake	Turkey Point Marina	203	Tu-Sun 9-5	N	\$3.00
South	Ramsay Lake	Mayo Ridge Marina	208	Th-Tu 9-5	N	\$5.00
South	Ramsay Lake	Norris Marina	DNR12	Tu-Sun 8-5	N	Free
South	River Direct	Liberty Marina	150	M-Sun 9-5	N	\$5.00
South	Selby Bay	Selby Bay Yacht Marina	196	M-Fri 8-7, Sat 7-5, Sun 7-7	M-Fri 8-5	\$5.00
South	Selby Bay	Holiday Pt. Marina #1	197	M-Fri 7:30-4	N	Free
South	Selby Bay	Anchor Yacht Basin	201	M-Sun 8-5	N	\$15.00
West	Johns	Shady Oaks Marina	251	M-Sun 8-5	N	\$5.00
West	Parish	Backyard Boats	232	M-Sun 8-4	N	\$5.00
West	River Direct	West River Fuel Dock	BCC1	M-Th 9-5, Fri 9-6, S-S 8-6	N	\$5.00
West	River Direct	WestRhode Riverkeeper Pumpout	BCC2	Fri-M 9-5	N	\$5.00
West	South	Chesapeake Yacht Club	245	W-M 8-4	N	\$5.00
West	Tenthouse	West River Yacht Harbour	231	M-Sun 8-8	N	\$5.00
West	Tenthouse	Hartge Yacht Harbour	243	M-Fri 8-5	N	\$5.00
Rhode	Cadle	Cadle Creek Marina	219	M-Fri 8-5	N	\$5.00
Rhode	Cadle	Casa Rio Marina	216	M-Fri 8-4, Sat 8-3, Sun 10-2	N	\$5.00
Rhode	Whitemarsh	Rhode River Marina	211	M-Sat 8-5	M-Sat 8-5	\$15.00
Rhode	Whitemarsh	Holiday Hill Marina	210	M-Sun 8-5	N	Free
Rhode	Whitemarsh	Bluewater Marina	212	M-Sun 9-5	N	\$5.00

### *2.3.1 Facility Accessibility*

As shown in appendix tables A.1.1 and A.1.2, 56 marinas offer pump-out facilities to the public and 18 marinas offer these privately. The private marina pump-outs account for a total of 665 slips while the marinas with public pump-outs account for 5,530 slips. This comparison is quite misleading, however, because Anne Arundel County receives a large number of transient vessels annually, virtually all of which are serviced by the public marinas.

### *2.3.2 Facility Maintenance Plans*

As far as could be determined, all of the public marinas included in this application have a maintenance plan of some sort. This assertion is certainly true of all of the Clean Marinas, those which receive DNR grant funding for a pump-out facility, and all of the marinas that operate under an MDE general discharge permit.

Noted in surveys to prepare this application, dredging was among the most common (and expensive) maintenance activity since adequate water depth at the dock is critical to the success of the business.

## 2.4 Facility Draught Requirements

Table 2.4.1 shows the mean low-water depth availability and height limitations for boats coming into the marina. Only one of the 56 public marinas had a meaningful height limit: Oak Grove Marina, upstream from the 53' clearance on the Route 2 bridge over the South River. Vessels traveling to Little John Marina and Smith's Marina, both upstream from the U.S. Naval Academy (Route 450) bridge over the Severn River, are limited to the bridge's 75' clearance. Neither of these bridge height limitations have any practical limitation on the availability of pump-outs because eight marinas with pump-out facilities sit downstream of the South River bridge and 13 marinas are downstream of the Severn River bridge.

Two of the proposed no discharge zone waterbodies—Stoney Creek and Spa Creek—have drawbridges near their mouths with the Patapsco River and the Severn River, respectively. Both drawbridges operate year-round on well-publicized schedules and, when open, pose no height limitations.

**Table 2.4.1: Draught and Height Requirements for Marinas with Public Pump-outs**

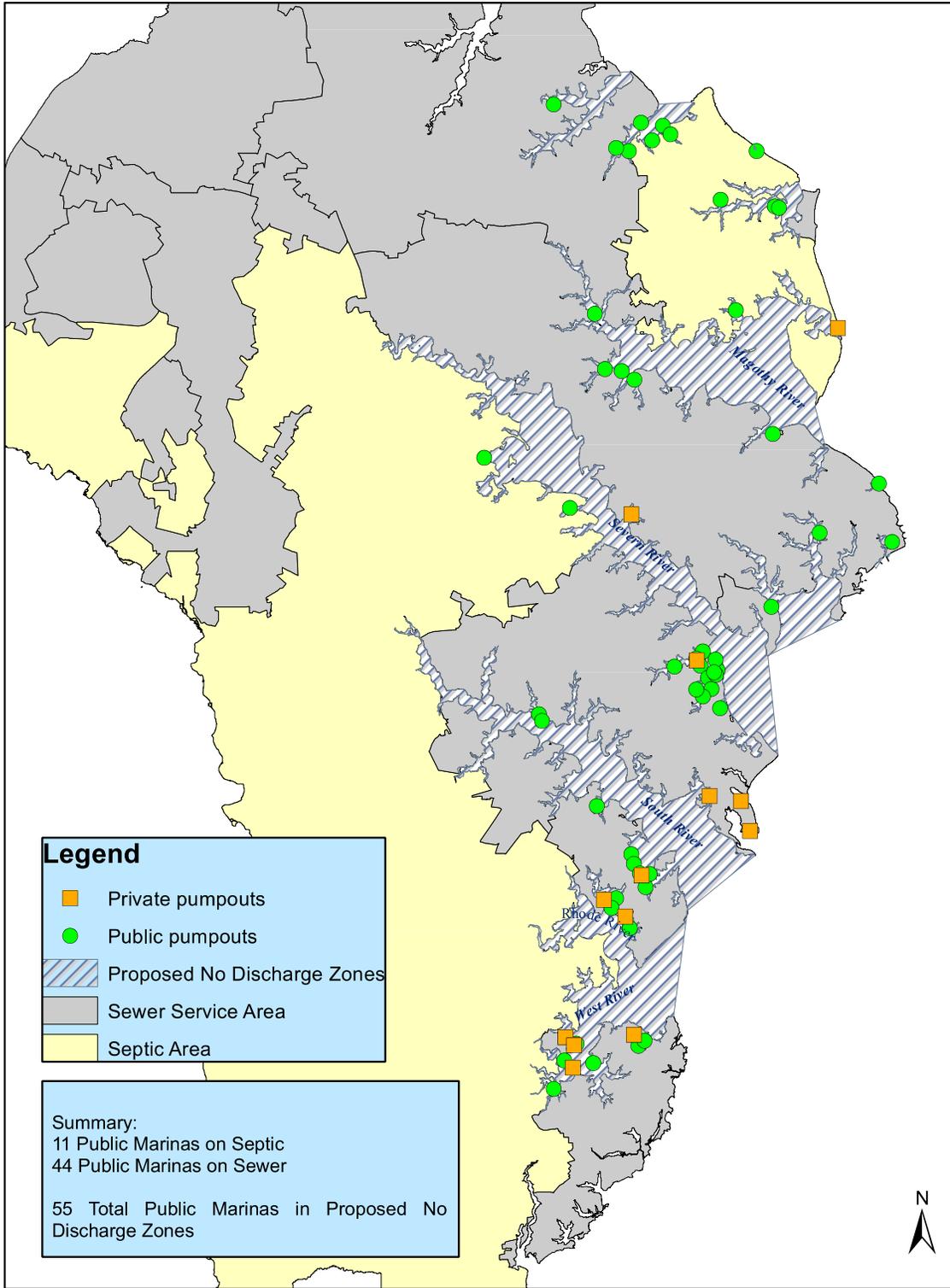
River	Creek	Marina	Map Code	MLW	Height Lim	% Vessels Excluded
Patapsco	Bodkin	Pleasure Cove Marina	26	6 ft	None	0
Patapsco	Bodkin	Ventnor Marine Service	27	6ft	None	0
Patapsco	Bodkin	Hammock Island Marina	29	6 ft	None	0
Patapsco	River Direct	Atlantic Marina Resort	18	5 ft	None	0
Patapsco	Rock	Blake's Bar Harbor Marina	11	4 ft	None	0
Patapsco	Rock	Maryland Yacht Club	12	16 ft	None	0
Patapsco	Rock	Fairview Marina	13	6 ft	None	0
Patapsco	Rock	White Rocks Marina	14	11 ft	None	0
Patapsco	Rock	Oak Harbour Marina	19	12-15 ft	None	0
Patapsco	Rock	Pasadena Yacht Yard (PYY marine)	DNR14	4 ft	None	0
Patapsco	Stoney	Nabbs Creek Marina	8	6 ft	19 ft	Draw Bridge
Magothy	Cypress	Cypress Marina, Inc.	66	8.5 ft	None	0
Magothy	Cypress	Magothy Marina, Inc.	70	16 ft	None	0
Magothy	Deep	Fairwinds Marina	91	5 ft	None	0
Magothy	Gray's	Atlantic Marina on the Magothy	38	6.5 ft	None	0
Magothy	Mill	Ferry Point Marina and Yachtyard	73	8 ft	None	0
Magothy	River Direct	Hamilton Harbour Marina and Boatworks	39	12 ft	None	0
Chesapeake Bay	Mezick Ponds	Sandy Point Marina	116	Varies	None	0
Chesapeake Bay	Mill	John L. Dunning Memorial Pier	DNR8	15 ft	None	0
Chesapeake Bay	Podickory	Podickory Point Yacht and Beach Club	102	6 ft	None	0
Chesapeake Bay	Whitehall	Scandia Marine Center	111	11 ft	None	0
Severn	Back	Mears Marina Annapolis	COA5	6 ft	None	0
Severn	Back	Port Annapolis Marina	COA6	9 ft	None	0
Severn	Back	Horn Point Harbor Marina	COA8	8 ft	None	0
Severn	Back	Eastport Yacht Center	COA10	5-6 ft	None	0
Severn	Back	Bert Jabin Yacht Yard	COA11	7 ft	None	0
Severn	Back	Watergate Pointe Marina	COA16	6 ft	None	0
Severn	Back	J Port Marina	DNR9	10 ft	None	0
Severn	Browns Cove	Smith's Marina	99	7 ft	75 ft	1%
Severn	Chesapeake Harbour	Chesapeake Harbour Marina	143	7-8 ft	None	0
Severn	Ego Alley	City of Annapolis Pumpout Boat	DNR1	N/A	None	0
Severn	River Direct	Annapolis Maryland Capitol Yacht Club	COA14	7 ft	None	0
Severn	Spa	The President Point Marina	DNR16	7 ft	17 ft	Draw Bridge
Severn	Spa	The Yacht Basin Co.	COA1	11 ft	None	0
Severn	Spa	Annapolis City Marina	COA3	18 ft	None	0
South	Brewer	Pocahontas Marina	189	6.5 ft	None	0
South	Gingerville	Oak Grove Marina	145	12 ft	53 ft	2%
South	Ramsay Lake	Turkey Point Marina	203	9 ft	None	0
South	Ramsay Lake	Mayo Ridge Marina	208	2 ft	None	0
South	Ramsay Lake	Norris Marina	DNR12	7 ft	None	0
South	River Direct	Liberty Marina	150	50 ft	None	0
South	Selby Bay	Selby Bay Yacht Marina	196	7 ft	None	0
South	Selby Bay	Holiday Pt. Marina #1	197	6 ft	None	0
South	Selby Bay	Anchor Yacht Basin	201	5 ft	None	0
West	Johns	Shady Oaks Marina	251	3.5 ft	None	0
West	Parish	Backyard Boats	232	7 ft	None	0
West	River Direct	West River Fuel Dock	BCC1	8 ft	None	0
West	River Direct	WestRhode Riverkeeper Pumpout Boat	BCC2	N/A	None	0
West	South	Chesapeake Yacht Club	245	7 ft	None	0
West	Tenthouse	West River Yacht Harbour	231	10 ft	None	0
West	Tenthouse	Hartge Yacht Harbour	243	5 ft	None	0
Rhode	Cadle	Cadle Creek Marina	219	7 ft	None	0
Rhode	Cadle	Casa Rio Marina	216	6 ft	None	0
Rhode	Whitemarsh	Rhode River Marina	211	5 ft	None	0
Rhode	Whitemarsh	Holiday Hill Marina	210	5 ft	None	0
Rhode	Whitemarsh	Bluewater Marina	212	10 ft	None	0

## 2.5 Facility Waste Treatment Methods

The map on the following page shows marinas with public pump-out facilities in relation to sewage service areas. Of the 56 marinas, 11 use septic systems and 45 are connected to the county's sewer system.

The marinas that use septic systems are managed by Onsite Sewage Disposal System (OSDS). Each marina with an OSDS has site-specific parameters, meaning that its OSDS is designed specifically for that area. All marinas with OSDSs will require occasional pump-outs; the schedule is dependent upon the site-specific size of the holding tanks. Table 2.5.1 shows whether the marinas with public pump-outs use the public sewer or holding tanks. If the marina is served by the public sewer, its waste is simply discharged directly into the public sewer system.

## Anne Arundel County Septic vs Sewer Service and Pump-out Locations



**Table 2.5.1: Marina Disposal Methods**

River	Creek	Marina	Map Code	Disposal
Patapsco	Bodkin	Pleasure Cove Marina	26	Holding Tank
Patapsco	Bodkin	Ventnor Marine Service	27	Holding Tank
Patapsco	Bodkin	Hammock Island Marina	29	Holding Tank
Patapsco	River Direct	Atlantic Marina Resort	18	Holding Tank
Patapsco	Rock	Blake's Bar Harbor Marina	11	Direct Sewege
Patapsco	Rock	Maryland Yacht Club	12	Holding Tank
Patapsco	Rock	Fairview Marina	13	Holding Tank
Patapsco	Rock	White Rocks Marina	14	Holding Tank
Patapsco	Rock	Oak Harbour Marina	19	Holding Tank
Patapsco	Rock	Pasadena Yacht Yard (PYY marine)	DNR14	Direct Sewege
Patapsco	Stoney	Nabbs Creek Marina	8	Direct Sewege
Magothy	Cypress	Cypress Marina, Inc.	66	Direct Sewege
Magothy	Cypress	Magothy Marina, Inc.	70	Direct Sewege
Magothy	Deep	Fairwinds Marina	91	Direct Sewege
Magothy	Gray's	Atlantic Marina on the Magothy	38	Holding Tank
Magothy	Mill	Ferry Point Marina and Yachtyard	73	Direct Sewege
Magothy	River Direct	Hamilton Harbour Marina and Boatworks	39	Direct Sewege
Chesapeake Bay	Mezick Ponds	Sandy Point Marina	116	Direct Sewege
Chesapeake Bay	Mill	John L. Dunning Memorial Pier	DNR8	Direct Sewege
Chesapeake Bay	Podickory	Podickory Point Yacht and Beach Club	102	Direct Sewege
Chesapeake Bay	Whitehall	Scandia Marine Center	111	Direct Sewege
Severn	Back	Mears Marina Annapolis	COA5	Direct Sewege
Severn	Back	Port Annapolis Marina	COA6	Direct Sewege
Severn	Back	Horn Point Harbor Marina	COA8	Direct Sewege
Severn	Back	Eastport Yacht Center	COA10	Direct Sewege
Severn	Back	Bert Jabin Yacht Yard	COA11	Direct Sewege
Severn	Back	Watergate Pointe Marina	COA16	Direct Sewege
Severn	Back	J Port Marina	DNR9	Direct Sewege
Severn	Browns Cove	Smith's Marina	99	Holding Tank
Severn	Chesapeake Harbour	Chesapeake Harbour Marina	143	Direct Sewege
Severn	Ego Alley	City of Annapolis Pumpout Boat	DNR1	Direct Sewege
Severn	River Direct	Annapolis Maryland Capitol Yacht Club	COA14	Direct Sewege
Severn	Spa	The President Point Marina	DNR16	Direct Sewege
Severn	Spa	The Yacht Basin Co.	COA1	Direct Sewege
Severn	Spa	Annapolis City Marina	COA3	Direct Sewege
South	Brewer	Pocahontas Marina	189	Direct Sewege
South	Gingerville	Oak Grove Marina	145	Direct Sewege
South	Ramsay Lake	Turkey Point Marina	203	Direct Sewege
South	Ramsay Lake	Mayo Ridge Marina	208	Direct Sewege
South	Ramsay Lake	Norris Marina	DNR12	Direct Sewege
South	River Direct	Liberty Marina	150	Direct Sewege
South	Selby Bay	Selby Bay Yacht Marina	196	Direct Sewege
South	Selby Bay	Holiday Pt. Marina #1	197	Direct Sewege
South	Selby Bay	Anchor Yacht Basin	201	Direct Sewege
West	Johns	Shady Oaks Marina	251	Direct Sewege
West	Parish	Backyard Boats	232	Direct Sewege
West	River Direct	West River Fuel Dock	BCC1	Direct Sewege
West	River Direct	WestRhode Riverkeeper Pumpout Boat	BCC2	Direct Sewege
West	South	Chesapeake Yacht Club	245	Direct Sewege
West	Tenthouse	West River Yacht Harbour	231	Direct Sewege
West	Tenthouse	Hartge Yacht Harbour	243	Direct Sewege
Rhode	Cadle	Cadle Creek Marina	219	Direct Sewege
Rhode	Cadle	Casa Rio Marina	216	Direct Sewege
Rhode	Whitemarsh	Rhode River Marina	211	Direct Sewege
Rhode	Whitemarsh	Holiday Hill Marina	210	Direct Sewege
Rhode	Whitemarsh	Bluewater Marina	212	Direct Sewege

## 3.0 Vessel Population and Usage Information

### 3.1 Vessel Population

An estimate of the number of boats in Anne Arundel County waters must encompass three types of information. First, and most common, are vessels registered in the State of Maryland through the Department of Natural Resources (DNR). Second, some vessels located in the proposed no discharge zone are documented by the U.S. Coast Guard and reported to be in Anne Arundel waters. Finally, at any given time, vessels are in transit through these waters, but are not registered in Maryland or documented as “local” by the Coast Guard.

A separate source of information was used for each of these three categories of vessels.

First, the Department of Natural Resources provided data, shown in Table A.2.1 of the Appendix, giving the count of boats registered in Maryland by zip code and by size. The data were requested for all 42 zip codes in Anne Arundel County. Although some MD vessels registered to owners in Anne Arundel County are operated elsewhere and some registered to owners in other counties are operated in Anne Arundel, this procedure seems a reasonable basis for estimation. The DNR data separate vessels by four length categories consistent with the requirements of this application. The results of this category provide an estimate of 21,712 registered vessels in the county.

Second, the website [www.BoatInfoWorld.com](http://www.BoatInfoWorld.com)<sup>5</sup> provided the number of documented boats in the Anne Arundel County area by zip code and size. The appendix (Table A.2.2) provides the raw data. As with the data for registered vessels, this information is broken down into four consistent lengths. The total number of documented vessels is estimated at 4,990.

The estimated number of transient vessels is derived from manipulating the number from Douglas Lipton’s 2005 study of transient vessels in Maryland.<sup>6</sup>

First, the relationship between total Anne Arundel County-registered boats and total Maryland-registered boats was calculated from the Coast Guard’s 2011 National Recreational Boating Survey,<sup>7</sup> which found a total of 184,796 registered vessels in Maryland. Equation E.1 shows this process.

$$\frac{\text{Total AA County Registered}}{\text{Total MD Registered}} = \frac{21,712}{184,796} \approx 0.117497 \sim 11.8\% \text{ MD boats are AA County} \quad \text{E.1}$$

Next, this ratio was applied to the data for transient vessels in Maryland in 2011<sup>7</sup>, by multiplying each number by the fraction determined above. Table A.2.3 in the appendix list the raw data from the Lipton<sup>6</sup> study. From the table in the study, the total number of transients over 40’ long was used, while the number of transients in any other size category was estimated because the data given were not sufficiently specific. For example, the number of transient sailboats was split

into two categories: those longer than 40' and those shorter or equal to 39'. It was estimated that this number would fall into the category of boats ranging from 26 to 40' long. Table 3.1 shows the placement of each length category.

**Table 3.1: Length Categories Transferred from Study to Report**

<b>Length Category from Study<sup>6</sup> (in feet)</b>	<b>Put into which category (in feet)</b>
<b>Power Boats &lt; 29</b>	16 to < 26
<b>Power Boats 30 – 39</b>	26 to < 40
<b>Power Boats 40 – 49</b>	> 40
<b>Power Boats 50 – 59</b>	> 40
<b>Power Boats 60+</b>	> 40
<b>Sailboats ≤ 39</b>	26' to < 40
<b>Sailboats 40+</b>	> 40

After these decisions were made, 11.8 percent of each category was found, shown in Table 3.2 below.

**Table 3.2: Final Transient Count**

<b>Length in feet</b>	<b>Maryland Transients</b>	<b>AA County Transients</b>
<b>&gt; 40</b>	8,691	1,026
<b>26 to &lt; 40</b>	13,298	1,569
<b>16 to &lt; 26</b>	4,168	492
<b>&lt; 16</b>	0	0
<b>TOTAL</b>	26,157	3,087

Table 3.3 shows all of the data gathered for estimating the total number of vessels in the Anne Arundel County.

**Table 3.3: Vessel Population Estimates for Anne Arundel County**

<b>Vessel Length</b>	<b>Number of Registered Vessels</b>	<b>Number of Documented Vessels<sup>5</sup></b>	<b>Estimated Number of Transient Vessels</b>	<b>Total Estimated Number of Vessels</b>
<b>&gt; 40'</b>	736	1,466	1,026	3,228
<b>26' to &lt; 40'</b>	4,070	3,433	1,569	9,072
<b>16' to &lt; 26'</b>	9,724	91	492	10,307
<b>&lt; 16'</b>	7,182	0	0	7,182
<b>TOTAL</b>	21,712	4,990	3,087	29,789

## 3.2 Vessel Usage: Recreational and Commercial

The methods used above to estimate the vessel population of Anne Arundel County does not distinguish between vessels used for purely recreational versus commercial purposes. However, recognizing the special requirements of certain types of commercial vessels with regards to marine sanitation, a telephone- and internet-based survey was conducted to identify commercial vessels in each of the 13 waterbodies the proposed no discharge zone.

To summarize the survey findings, commercial vessels that operate within the proposed no discharge zone can be categorized into three broad classes. First are watermen's vessels dedicated to fishing, shellfishing, and crabbing. Approximately 50 watermen belong to the Anne Arundel Watermen's Association. Not all of them operate their own vessels, and not all watermen are members of the association, but 50 may serve as a rough estimate of this class of commercial vessels. In some cases, these vessels are available for charter by the public with a professional captain, typically for day fishing.

The second category of commercial vessels are those available for rent or charter, normally from companies located in marinas. The specifics vary widely, but in general these vessels are essentially identical to their "recreational" equivalents with respect to marine sanitation devices. This category includes the water taxis that operate in the Annapolis harbor, making short trips that do not require the vessels to have MSDs aboard.

The third category of commercial vessels focus on three firms operating cruise ships: American Cruise Lines and Blount Small Ship Adventures, whose ships stop at Annapolis in the course of Chesapeake bay-wide cruises, and Watermark Journey, which operates ships based in Annapolis.

### 1. Stoney Creek

No commercial operations identified.

### 2. Rock Creek

No commercial operations identified.

### 3. Atlantic Marina Resort

- Annapolis Boat Club, <https://annapolisboatclub.com>  
210 Knollwood Dr., Pasadena, MD 21122  
Phone 443 261 0741  
Membership organization with access to a fleet of Nauticstar outboard boats

### 4. Bodkin Creek

No commercial operations identified.

## 5. Magothy and Little Magothy Rivers

- *Down Time Charters* <https://downtimecharters.com>  
Phone 443 995 8666  
7am - 1pm  
29' C-Hoak out boat Fishing w/Captain- Operations out of Fairwinds Marina  
1000 Fairwinds Dr Annapolis Md 21409

## 6. Podickory Creek

There are no commercial boating operations in Podickory Creek.

## 7. Sandy Point/Mezick Ponds

## 8. Whitehall Bay

## 9. Severn River

- American Cruise Lines  
741 Boston Post Rd Suite 200  
Guilford, CT 06437

By far the largest ships that enter the proposed No Discharge Zone in the Severn River are three passenger ships of American Cruise Lines: the 100-guest *American Star* and *Independence* and the 175-guest *American Constitution*. Under normal operations, these ships make a seven-day round-trip “Chesapeake Cruise” from Baltimore to Yorktown/Williamsburg, stopping at Annapolis on Day 6. The ships normally arrive at approximately 6:30- 7:00 a.m. and depart for Baltimore about 12 hours later, anchoring in the outer reaches of the outer harbor of Annapolis. All of the American Cruise Line ships operating in the Chesapeake Bay have sufficient on-board sewage holding tank capacity to avoid any waste discharge in the Severn River and would subsequently discharge while underway in the main stem of the Bay.

- Blount Small Ship Adventures  
Warren, RI, Phone 401 247 0955

In 2019 Blount began a 10-day Chesapeake Bay cruise using the 84-passenger *Grande Mariner*. The cruise includes a one-day stopover in Annapolis. All Blount ships are designed to operate in No Discharge Zones and are built with 48-hour holding tank capacity for full passenger loads.

- Watermark Journeys  
Annapolis, MD 21403, [www.watermarkjourney.com](http://www.watermarkjourney.com)

Watermark operates 13 commercial vessels including several water taxis operating in Annapolis harbor up to larger vessels that offer cruises to Baltimore and St. Michaels. The highest-profile vessel is the Harbor Queen, operating from Annapolis City Dock and offering short tours of the harbor and adjoining Severn River. The vessel, which watermark purchased in the late 1960s, cannot be operated successfully with a holding tank unless there were a pump-out facility at Annapolis City Dock. For this reason, The Severn River Association and the City Dock Action Committee recommend that the City of Annapolis install a commercial pump-out facility at City Dock.

- Annapolis Electric Boat Rentals, <http://aebrentals.com>  
3 Electric boats, 22' ,seat 10  
1-5 hour rental
- Capital SUP
- Kayak Annapolis, [www.kayakannapolistours.com](http://www.kayakannapolistours.com)  
900 Truxton Park Rd., Annapolis, MD 21403, Phone 443 949 0773  
Rental and guided history tours
- Annapolis Canoe and Kayak, [www.annapoliscanoeandkayak.com](http://www.annapoliscanoeandkayak.com)  
Phone 443 263 2303
- Pirate Adventures on the Chesapeake, [www.chesapeakepirates.com](http://www.chesapeakepirates.com)  
311 3<sup>rd</sup> St., Annapolis MD 21403  
Phone 410 263 0002  
Owner: Mike Tomasini  
1 Pirate ship
- Schooner *Woodwind*  
80 Compromise St, Annapolis MD 21401  
Phone 410 263 7837  
2-74' Schooners- up to 4 times daily from Annapolis waterfront hotel  
Public and Private cruises
- Schooner *Liberté*  
Capt. Chris & Jane Tietje  
[theliberte@gmail.com](mailto:theliberte@gmail.com)  
Phone 410 263 8234
- Annapolis Boat Club <https://annapolisboatclub.com>  
7082 Bembe Beach Rd Annapolis Md Suite 204 21403  
Phone 443 263 0741

- J-World  
J/80 Sail boat Lessons and races
- Chesapeake Boating Club
- Cruise Annapolis <https://cruiseannapolis.com>  
222 Severn Ave Annapolis, Md 21403  
Phone 443 203 4112  
20 + Charter sail boats

## 10. Oyster Creek

No commercial operations identified.

## 11. Fishing Creek

US Coast Guard Station Annapolis is located on Fishing Creek. No commercial operations identified.

## 12. South River

- South River Boat Rentals, [www.southernriverboatrentals.com](http://www.southernriverboatrentals.com)
- Quiet Waters Park  
Bike and Boat Rental
- Pier 7 Resort Marina, [www.piersevenmarina.com](http://www.piersevenmarina.com) .  
48 South Severn Rd, Edgewater, MD 20732, Phone 410 956 2288  
  
Rental of crewed Gemini catamaran sailboats, 35', 37', and 39' long, and rental and instruction in stand up paddleboards.
- CareFree Boat Club, <https://carefreeboats.com> . Located at Oak Grove Marina, 2820 Solomons Island Rd, Edgewater, MD 21037, Phone 866 332 9048. Membership organization offering access to a fleet of 19 inboard boats 22-28' long.

## 13. West and Rhode Rivers

### 3.3 Adequate Pump Out Facilities

3.4 shows the process in determining the estimated number of pump-out facilities required, following the instructions on page 4-34 of the EPA’s no discharge zone application guide.<sup>8</sup> The estimated number of required pump-out facilities rounds to 31. The total number of pump-out facilities available to the public is 56—nearly double the number of required pump-out facilities, not counting the 13 pump-out facilities available to those who own slips at private marinas.

**Table 3.4: Estimate of Required Pump-out Facilities**

<b>Step</b>	<b>Direction</b>	<b>Answer</b>
<b>1</b>	Enter # of vessels 26' to < 40' long	9,072
<b>2</b>	Enter percent of 26' to < 40' vessels with holding tanks	45% <sup>8</sup>
<b>2a</b>	Calculate estimated no. of 26' to < 40' vessels with holding tanks (multiply 1 by 2)	4,082.4
<b>3</b>	Enter # of vessels > 40' long	3,228
<b>3a</b>	Calculate estimated total no. vessels with holding tanks (add 2a with 3)	7,310.4
<b>4</b>	Enter estimated peak occupancy rate (if unknown, use 40%)	40%
<b>4a</b>	Calculate estimated no. of vessels requiring pump-out facilities (multiply 3a by 4)	2,924.16
<b>5</b>	Enter average no. of vessels served per hour at pump-out (in unknown, use 4)	4
<b>6</b>	Enter average no. of hours of operation per weekend (in unknown, use 24)	24
<b>6a</b>	Calculate estimated no. of vessels served per pump-out facility (multiply 5 by 6)	96
<b>6b</b>	Calculated estimated no. of required pump-out facilities (divide 4a by 6a)	31

Table 3.5 shows the process to determine the estimated number of dump stations required, following the instructions on page 4 – 35 of the EPA’s no discharge zone application guide.<sup>8</sup> The estimated number of required dump stations rounds to 4. The number of dump stations available to the public is 12—three times the required number. The marinas with dump stations for portable toilets include: Hammock Island Marina on Bodkin Creek; Magothy Marina, and Hamilton Harbour Marina and Boatworks on the Magothy; Podickory Point Yacht Club on the Chesapeake Bay; Chesapeake Harbour Marina, President Point Marina, and Annapolis City Marina on the Severn; Mayo Ridge Marina, Selby Yacht Basin, and Holiday Point Marina on the South; and West River Yacht Harbor and Hartge Yacht Harbour on the West.

**Table 3.5: Estimate of Required Dump Stations**

<b>Step</b>	<b>Direction</b>	<b>Answer</b>
<b>1</b>	Enter # of vessels 16' to < 26' feet long	10,307
<b>2</b>	Enter percent of 16' to < 26' vessels with portable toilets	24% <sup>8</sup>
<b>2a</b>	Calculate estimated total no. of vessels with portable toilets (multiply 1 by 2)	2,473.68
<b>3</b>	Enter estimated peak occupancy rate (if unknown, use 40%)	40%
<b>3a</b>	Calculate estimated no. of vessels requiring dump stations (multiply 2a by 3)	989.47
<b>4</b>	Enter average no. of vessels served per hour at dump station (in unknown, use 12)	12
<b>5</b>	Enter average no. of hours of operation per weekend (if unknown, use 24)	24
<b>5a</b>	Calculate estimated no. of vessels served per dump station (multiply 4 by 5)	288
<b>5b</b>	Calculate estimated no. of dump stations required (divide 3b by 5a)	3.44

## 4.0 Other Information

This section provides additional information on the public education program (Section 4.1), a summary of the City of Annapolis’s ordinance concerning its harbor (Section 4.2), and how the no discharge zone will be enforced after the application is approved by the EPA (Section 4.3).

### 4.1 Public Education Plan

The tremendously successful partnership between EPA and Maryland DNR has created the conditions which have made this no discharge zone application possible. First, DNR administers grants to marinas—comprised of 75 percent Clean Vessel Act funds awarded to the state by the U.S. Fish & Wildlife Service and 25 percent state special funds—to install marine sewage pump-out facilities. These grants have resulted in 36 marinas in Anne Arundel County that currently operate grant-funded pump-out facilities. Second, among these marinas with pump-out facilities, 30 have received certification as Clean Marinas. Third, the DNR Clean Boating program has produced a wide array of boater education materials disseminated throughout the state.

#### 4.1.1 Anne Arundel County

Anne Arundel County has fully embraced the Clean Boating program and promotes it through the county’s website at <http://www.aacounty.org/departments/public-works/wprp/clean-boating/index.html>. These pages are found in the Watershed Protection and Restoration Program (WPRP), a unit of the Public Works Department.

Although no WPRP staff have direct responsibility for promoting the Clean (or “Responsible”) Boating program, the primary responsibility falls to the Anne Arundel Economic Development Corporation (AAECD), which has one staff member who serves as liaison to a citizens’ advisory body, the Maritime Industry Advisory Board.

Separately, Anne Arundel County is served by the Severn River Commission, established to advise the county and City of Annapolis on measures to preserve the Severn as a “Scenic” River. Both of these advisory bodies have played active roles in supporting the development of this application, and they will play important roles in developing educational materials to implement the no discharge zones.

#### 4.1.2 City of Annapolis

The City of Annapolis occupies about half of the Annapolis Neck Peninsula between the South and the Severn rivers, with its waterfront along four creeks on the Severn River.

Recent city-county cooperation on Weems Creek has enabled the Annapolis Harbormaster's office to clean up the abandoned derelict vessels in the county's half of the waterway. It is expected that the city and county will set up mutual institutional arrangements to manage the no discharge zone.

The City of Annapolis is served by two relevant citizens' advisory groups: the Annapolis Maritime Advisory Board and the Annapolis Environmental Commission. The Maritime Advisory Board provides advice to the Department of Planning and Zoning through the Economic Development section. The Environmental Commission provides advice to the Office of Environmental Policy in the city manager's office.

The city is also home to the only harbormaster in Maryland, an office that operates one pump-out vessel and enforces the ordinance on city waters. The harbormaster will be the primary source of educational materials and enforcement on the no discharge zones in the four creeks—Back, Spa, College, and Weems—in the city.

It is clear that a commercial-grade pump-out facility is needed at Annapolis City Dock, a recommendation made by the Severn River Association and endorsed by the City Dock Action Committee. The pump-out would serve the Harbor Queen, which docks at City Dock, and visiting commercial vessels, including tall ships, that visit Annapolis.

Annapolis and Anne Arundel County will approach the management of the No Discharge Zones by promoting clean boating principles that are already well-established rather than enforcing a new prohibition. The website <http://dnr.maryland.gov/boating/Pages/cleanmarina/resources.aspx> provides all of the information and goes well beyond sewage to include management of trash, fuel, oil (including oily bilge), fish waste, and habitat protection. This compilation of educational materials includes complete lesson plans and PowerPoint slides.

#### *4.1.3 Maritime Businesses*

The existence of the Maritime Industry Advisory Board (advising the County) and the Maritime Advisory Board (in Annapolis) is evidence of the attention both jurisdictions give to recreational boaters and the hundreds of businesses that support recreational boating. Among these businesses, the 56 commercial marinas with pump-out facilities are obviously on the front lines of any effort to create a successful county-wide no discharge zone. The fact that 27 of these marinas are already certified by MD DNR as Clean Marinas indicates that these frontline businesses willingly and voluntarily subject themselves to the highest standards of siting considerations, design and maintenance, stormwater management, vessel repair, petroleum control, sewage handling, and waste disposal. All of them currently communicate with their

slipholders and other customers on a wide range of subjects, including clean boating and pump-outs.

With such a well-established pump-out infrastructure already in place, the marinas in Annapolis and Anne Arundel County are already actively working to improve service delivery and reduce down-time, especially for system repair and maintenance. Best management practices disseminate quite rapidly through the Marine Trades Association of Maryland and other bodies. For instance, an increasing number of marinas are building “free” weekly or other regular pump-outs into their standard slip contracts. As awareness of boaters’ valuation of clean water grows among marina operators, a small but growing number are adding no-discharge clauses into annual and transient contracts with slipholders.

#### *4.1.4 Environmental Nonprofits*

At the time of this application, at least seven local nonprofit organizations are directly involved in promoting clean boating in a variety of ways, both formal and informal.

The West/Rhode Riverkeeper operates a pump-out boat that services all of the West and Rhode rivers and provides educational materials. The South Riverkeeper, working under the South River Federation, is active in water quality monitoring and environmental education. At the end of 2018, the West/Rhode Riverkeeper and the South River Federation consolidated into the Arundel Rivers Federation. See <https://arundelrivers.org>

The Back Creek Conservancy prepared the first draft of this application. At the end of 2018, the Back Creek Conservancy consolidated with the Severn River Association, the nation’s oldest river group, which formally incorporated the No Discharge Zone application into its mission. The Severn River Association conducts water and habitat quality monitoring and education programs. See <https://www.severnriver.org>

The Spa Creek Conservancy conducts water quality monitoring in Annapolis harbor and Spa Creek. See [www.spacreek.net](http://www.spacreek.net) .

The Magothy River Association: see <http://www.magothyriver.org/>

Restore Rock Creek: see <http://www.restorerockcreek.org/site/>

## 4.2 Local Discharge Ordinances

### City of Annapolis code 15.06.090 – Vessel Toilets<sup>9</sup>

A person may not operate the toilet fixtures of a vessel within City waters at any time so as to cause or permit to pass or be discharged into City waters any sewage or other waste matter or contaminate of any kind which does not meet State, County, and Federal requirements for water quality discharged by such devices. A person may not operate incinerating toilets in a vessel within City waters at any time.

(Ord. O-31-02 § 1 (part))

(Ord. No. O-41-08, § I, 5-11-2009)

## 4.3 Enforcement Plan

Law enforcement in the form of citations, fines, and other criminal penalties is the final option for creating an effective No Discharge program—a distant fourth to (1) education and outreach, (2) expanded service availability, and (3) warnings. The law enforcement organizations are the U.S. Coast Guard, the Maryland Department of Natural Resources (DNR) Police, and the City of Annapolis harbormaster.

The U.S. Coast Guard Station Annapolis is located in Fishing Creek, which is one of the proposed no discharge zones in this application. The station covers the entire territory from Curtis Bay (on the Patapsco River in the north) to south of Chesapeake Beach in Herring Bay (at the southern end of Anne Arundel County). The station operates three small vessels: one 45' long and two 29' long. The station's primary responsibilities are homeland security, search and rescue, and marine safety. Although the Coast Guard has authority to board vessels for any reason, they do not presently inspect MSDs and do not expect to issue citations for marine discharges.

### 4.3.1 State Enforcement

By state regulation, the Maryland Department of the Environment (MDE) has primary responsibility for enforcement of no discharge zone regulations. Since MDE does not patrol waterways, it is anticipated that most of its enforcement actions will come from reported violations. Violators may be reported by several sources, including the Natural Resources Police (NRP), local health agencies, marina owners, and boaters.

MDE's enforcement authority is outlined in the Code of Maryland Regulations, Title 26.08.03.01, which prohibits "The discharge of sewage from vessels to the waters of the State, designated as restricted zones. These zones shall be designated:

- (j) whenever greater environmental protection and enhancement is required, and
- (k) according to the procedures outlined in the Federal Act.”

The MDE has several enforcement provisions including criminal, civil, and administrative actions. When a no discharge zone citation is necessary, MDE will take an administrative action with fines not to exceed \$10,000 per violation, per day. The NRP will assist MDE in investigating violation reports and will issue citations when necessary.

Both agencies have agreed that a warning will be issued for first violations, with citations issued for subsequent offenses.

The point of contact at MDE for no discharge zone enforcement is the Compliance Program. Its telephone (410-537-3510) is answered during office hours (8:00 a.m. to 5:00 p.m.).

The MD DNR police conduct marine operations at six locations in the proposed no discharge zone:

- (1) Stoney Creek Bridge Marina on Stoney Creek—proposed no discharge zone site 1;
- (2) Sandy Point Marina (116) at Mezick Ponds in Sandy Point State Park—proposed no discharge zone site 10;
- (3) Magothy Marina (70) on Cypress Creek in the Magothy River—proposed no discharge zone site 5;
- (4) Liberty Marina (150) on the South River—proposed no discharge zone site 12;
- (5) the Smithsonian Environmental Research Center (SERC) on the Rhode River—proposed no discharge zone site 13; and
- (6) Herrington Harbor South marina in the existing no discharge zone at Herring Bay.

In Anne Arundel County, the NRP operate several types of small vessels that routinely patrol Anne Arundel County waterways. They report that they do not have the capacity to perform routine checks on MSDs, checking, for example, to ensure that holding tank Y valves are secured in a closed position.

#### *4.3.2 Annapolis Harbormaster*

The only harbormaster in the State of Maryland is located in the City of Annapolis. The incumbent, Beth Bellis, took office in 2017 after 20 years as a Natural Resources police officer.

The Annapolis harbormaster operates a very active pump-out vessel and requires periodic pump-outs of all vessels moored in Annapolis waters. The substantial year-round liveaboard population presents an important range of challenges for the harbormaster as well as the marinas at which nearly all of them reside.

Currently, awareness of pump-out BMPs is growing, but with no systematic discussion. Newport, RI uses stickers recording no discharge zone fee payment. Virginia Beach uses dye tablets. No plans now exist to launch any program similar to these.

#### *4.3.3 Pump-Out BMP and TMDL Credit*

The recommendations of the Boat Pump-Out BMP Expert Panel present important opportunities for both Anne Arundel County, a Phase I jurisdiction, and the City of Annapolis, in Phase II. The report (March 2018) notes:

Although each individual pump-out facility installation would not be credited, the programmatic BMP could be part of a jurisdictions' Phase 3 (2018 – 2025) watershed implementation plans (WIPs) and included as a management target if desired by the jurisdiction (p. 22).

## 5.0 End Notes

1. Portbook. *Annapolis & Eastern Shore*. Annapolis, MD: Portbook Media, 2017.
2. O'Neill, Donald and Donna Morrow. "No Discharge Zones in Maryland's Waters." MD DNR White Paper, 2007, updated 2014.
3. Chesapeake. *Chesapeake Bay TMDL Tracker*. 2009. Accessed 16 January 2018.  
<https://tmdl.chesapeakebay.net/>
4. Maryland Department of the Environment. "Water Quality Assessment Reports." 2016.  
[http://www.mde.maryland.gov/programs/Water/TMDL/Integrated303dReports/Pages/303d\\_map.aspx](http://www.mde.maryland.gov/programs/Water/TMDL/Integrated303dReports/Pages/303d_map.aspx)
5. *BoatInfoWorld*. 9 November 2017. Accessed 19 January 2018.  
<https://www.boatinfoworld.com/search.asp?type=bt>
6. Lipton, Douglas. "Sea Grant Maryland." May 2005. *University of Maryland*.  
<http://www.mdsg.umd.edu/sites/default/files/files/transientboat04.pdf>
7. United States Coast Guard. "National Recreational Boating Survey (NRBS)." 2011. *US CG Boating*.  
[http://www.uscgboating.org/assets/1/Page/1520b\\_USCG\\_RBS\\_NationalSurvey\\_Online\\_SinglePages.pdf](http://www.uscgboating.org/assets/1/Page/1520b_USCG_RBS_NationalSurvey_Online_SinglePages.pdf)
8. Environmental Protection Agency. *Protecting Coastal Waters From Vessel and Marina Discharges: A Guide For State And Local Officials*. Guide. Washington, DC: Office of Water, 1994. Document. <https://repositories.tdl.org/tamug-ir/handle/1969.3/27783>
9. Annapolis, City of. *Code of Ordinances*. 2009. Accessed 22 February 2018.  
[https://library.municode.com/md/annapolis/codes/code\\_of\\_ordinances?nodeId=TIT15HAWAAR\\_DIVIICIWA\\_CH15.06RUVPEUSWASH\\_15.06.090VETO](https://library.municode.com/md/annapolis/codes/code_of_ordinances?nodeId=TIT15HAWAAR_DIVIICIWA_CH15.06RUVPEUSWASH_15.06.090VETO)

## Appendices Appendix 1:

### Table A.1.1: Marinas with Public Pump-outs Organized by River then Creek

River	Creek	Marina	Map Code	Lat (N)	Long (W)	Phone #	Address	City	Slips	Maina Website
Patapsco	Bodkin	Pleasure Cove Marina	26	39°07'41.4"	76°28'24.3"	410 437 6600	1701 Poplar Ridge Rd	Pasadena	105	<a href="http://www.pleasurecove marina.com">www.pleasurecove marina.com</a>
Patapsco	Bodkin	Ventnor Marine Service	27	39°07'39.3"	76°27'01.1"	410 255 4100	8070 Ventnor Rd	Pasadena	135	
Patapsco	Bodkin	Hammock Island Marina	29	39°07'34.6"	76°26'53.8"	410 437 1870	8083 Ventnor Rd	Pasadena	64	<a href="http://www.hammockisland.com">www.hammockisland.com</a>
Patapsco	River Direct	Atlantic Marina Resort	18	39°08'42.1"	76°27'29.4"	410 437 6926	2010 Knollview Dr	Pasadena	60	<a href="http://www.atlanticmarinaresort.com">www.atlanticmarinaresort.com</a>
Patapsco	Rock	Blake's Bar Harbor Marina	11	39°09'19.3"	76°30'28.8"	410 255 5500	208 Barh Harbor Rd	Pasadena	55	<a href="http://www.blakesbarharbor marina.com">www.blakesbarharbor marina.com</a>
Patapsco	Rock	Maryland Yacht Club	12	39°09'16.0"	76°29'55.3"	410 255 4444	1500 Fairview Beach Rd	Pasadena	144	<a href="http://www.mdyc.org">www.mdyc.org</a>
Patapsco	Rock	Fairview Marina	13	39°09'06.0"	76°29'44.6"	410 437 3400	1575 Fairview Beach Rd	Pasadena	120	<a href="http://www.fairview marina.com">www.fairview marina.com</a>
Patapsco	Rock	White Rocks Marina	14	39°08'56.9"	76°30'11.4"	410 255 3800	1402 Colony Rd	Pasadena	375	<a href="http://www.whiterocks marina.com">www.whiterocks marina.com</a>
Patapsco	Rock	Oak Harbour Marina	19	39°08'44.3"	76°30'48.9"	410 255 4070	1343 Old Water Oak Pt Rd	Pasadena	100	<a href="http://www.oakharbour.marine.org">www.oakharbour.marine.org</a>
Patapsco	Rock	Pasadena Yacht Yard (P/Y Marina)	DNR14	39°08'47.7"	76°31'07.2"	410 255 1771	1130 Pasadena Yacht Yard Rd.	Pasadena	50	<a href="http://www.pymarina.biz">www.pymarina.biz</a>
Patapsco	Stoney	Nabbs Creek Marina	8	39°09'43.8"	76°32'45.5"	443 354 1918	864 Nabbs Creek Rd	Glen Burnie	120	<a href="http://www.nabbscreek marina.com">www.nabbscreek marina.com</a>
Magothy	Cypress	Cypress Marina, Inc.	66	39°04'18.6"	76°31'27.0"	410 647 7940	730 Cypress Rd	Severna Park	40	<a href="http://www.cypresmarina.net">www.cypresmarina.net</a>
Magothy	Cypress	Magothy Marina, Inc.	70	39°04'18.4"	76°31'07.1"	410 647 2356	360 Magothy Rd	Severna Park	182	<a href="http://www.marothymarina.com/index.html">www.marothymarina.com/index.html</a>
Magothy	Deep	Fairwinds Marina	91	39°02'59.1"	76°27'07.9"	410 974 0758	1000 Fairwinds Dr	Annapolis	100	<a href="http://www.fairwinds marina.com">www.fairwinds marina.com</a>
Magothy	Gray's	Atlantic Marina on the Magothy	38	39°05'31.1"	76°28'02.8"	410 360 2500	487 New York Ave	Pasadena	48	<a href="http://www.atlanticmarinaresort.com">www.atlanticmarinaresort.com</a>
Magothy	Mill	Ferry Point Marina and Yacht Yard	73	39°04'04.5"	76°30'41.5"	410 544 6368	700 Mill Creek Rd	Arnold	100	<a href="http://www.ferrypoint marina.com">www.ferrypoint marina.com</a>
Chesapeake Bay	River Direct	Hamilton Harbour Marina and Boatworks	39	39°05'26.1"	76°31'43.1"	410 647 0733	368 North Dr	Severna Park	20	<a href="http://www.hamiltonharbour marina.net">www.hamiltonharbour marina.net</a>
Chesapeake Bay	Mezick Ponds	Sandy Point Marina	116	39°00'52.9"	76°24'07.3"	410 974 2149	1100 East College Pkwy	Annapolis	25	<a href="http://www.statepar.kc.com">www.statepar.kc.com</a>
Chesapeake Bay	Mill	John L. Dunning Memorial Pier	DNR8	39°59'22.8"	76°27'08.9"	410 293 3721	140 Hooper High Rd	Annapolis	32	<a href="http://www.navywv annapolis.com">www.navywv annapolis.com</a>
Chesapeake Bay	Podickory	Podickory Point Yacht and Beach Club	102	39°01'58.1"	76°24'22.4"	410 757 8000	2116 Bay Front Terrace	Annapolis	120	<a href="http://www.podickorypoint.com">www.podickorypoint.com</a>
Chesapeake Bay	Whitehall	Scandia Marine Center	111	39°00'58.4"	76°25'52.0"	410 643 0037	1656 Homewood Landing Rd	Annapolis	110	<a href="http://www.scandia marineservices.com">www.scandia marineservices.com</a>
Severn	Back	Mears Marina Annapolis	COAS	38°58'04.8"	76°28'53.1"	410 268 8282	519 Chester Ave	Annapolis	186	<a href="http://www.mearsannapolis.com">www.mearsannapolis.com</a>
Severn	Back	Port Annapolis Marina	COA6	38°57'49.0"	76°28'43.6"	410 431 0381	7074 Bembie Beach Rd	Annapolis	225	<a href="http://www.portannapolis.com">www.portannapolis.com</a>
Severn	Back	Horn Point Harbor Marina	COA8	38°58'11.8"	76°28'34.4"	410 263 0550	105 Eastern Ave	Annapolis	56	<a href="http://www.hornpointharbour.com">www.hornpointharbour.com</a>
Severn	Back	Eastport Yacht Center	COA10	38°58'06.1"	76°28'36.7"	410 280 9988	726 2nd St	Annapolis	106	<a href="http://www.ecv.ertem.com">www.ecv.ertem.com</a>
Severn	Back	Bert Jabin Yacht Yard	COA11	38°57'37.2"	76°28'53.2"	410 268 9667	7310 Edgewood Rd	Annapolis	220	<a href="http://www.bjwy.com">www.bjwy.com</a>
Severn	Back	Watergate Pointe Marina	COA16	38°57'48.6"	76°29'07.6"	443 926 1303	655 Americana Dr	Annapolis	160	<a href="http://www.livew atergate marina.com">www.livew atergate marina.com</a>
Severn	Back	J Port Marina	DNR9	38°58'09.6"	76°28'39.9"	410 280 2040	213 Eastern Ave	Annapolis	22	<a href="http://www.jport marina.com">www.jport marina.com</a>
Severn	Brown's Cove	Smith's Marina	99	38°02'34.9"	76°34'33.2"	410 923 3444	529 Ridgely Rd	Crowsville	66	<a href="http://www.smiths marina.com">www.smiths marina.com</a>
Severn	Chesapeake Harbour	Chesapeake Harbour Marina	143	38°57'34.3"	76°28'30.8"	410 500 9059	2030 Chesapeake Harbour Dr	Annapolis	198	<a href="http://www.chesapeakeharbour marina.com">www.chesapeakeharbour marina.com</a>
Severn	Ego Alley	City of Annapolis Pumpout Boat	DNR1	38°58'39.4"	76°29'09.5"	410 320 6852	1 Dock St	Annapolis	0	<a href="http://www.annapolis.gov">www.annapolis.gov</a>
Severn	River Direct	Annapolis Maryland Capitol Yacht Club	COA14	38°58'24.9"	76°28'37.4"	410 269 5319	16 Chesapeake Landing	Annapolis	82	<a href="http://www.amnyc.com">www.amnyc.com</a>
Severn	Spa	The President Point Marina	DNR16	38°58'17.2"	76°29'37.7"	410 991 9381	President Point Drive	Annapolis	0	
Severn	Spa	The Yacht Basin Co.	COA1	38°58'29.7"	76°29'04.1"	410 263 3544	2 Compromise St	Annapolis	107	<a href="http://www.yachtbasin.com">www.yachtbasin.com</a>
Severn	Spa	Annapolis City Marina	COA3	38°58'17.4"	76°29'01.0"	410 268 0660	410 Severn Ave	Annapolis	89	<a href="http://www.annapolis city marina.com">www.annapolis city marina.com</a>
South	Brewer	Pocahontas Marina	189	38°55'27.4"	76°31'43.5"	410 533 8752	3365 Pocahontas Dr	Edgewater	47	<a href="http://www.pocahontas marina.com">www.pocahontas marina.com</a>
South	Gingerville	Oak Grove Marina	145	38°57'22.4"	76°33'10.2"	410 266 6696	2820 Solomons Island Rd	Edgewater	136	<a href="http://www.boatoakgrove.com">www.boatoakgrove.com</a>
South	Ramsay Lake	Turkey Point Marina	203	38°54'04.7"	76°30'23.4"	410 798 1369	1107 Turkey Point Rd	Edgewater	100	<a href="http://www.turkeypoint marina.com">www.turkeypoint marina.com</a>
South	Ramsay Lake	Mayo Ridge Marina	208	38°53'49.7"	76°30'29.4"	410 798 1952	1293 Mayo Ridge Rd	Edgewater	68	
South	Ramsay Lake	Norris Marina	DNR12	38°54'04.7"	76°30'22.4"	410 320 1628	1111 Turkey Point Rd	Edgewater	55	<a href="http://www.norris marina.com">www.norris marina.com</a>
South	River Direct	Liberty Marina	150	38°57'11.8"	76°33'09.4"	410 266 5633	64 Old South River Rd	Edgewater	320	<a href="http://www.liberty marina.com">www.liberty marina.com</a>
South	Selby Bay	Selby Bay Yacht Marina	196	38°54'29.0"	76°30'48.9"	410 798 0232	930 Selby Blvd	Edgewater	100	<a href="http://www.selby bay marina.com">www.selby bay marina.com</a>
South	Selby Bay	Holiday Pt. Marina #1	197	38°54'16.8"	76°30'41.0"	410 956 2208	3774 Beach Dr Blvd	Edgewater	171	<a href="http://www.holidaypoint marina.com">www.holidaypoint marina.com</a>
South	Selby Bay	Anchor Yacht Basin	201	38°54'05.2"	76°30'36.1"	410 269 6674	1048 Turkey Pt Rd	Edgewater	110	<a href="http://www.anchorvachtbasin.com">www.anchorvachtbasin.com</a>
West	Johns	Shady Oaks Marina	251	38°49'44.9"	76°32'52.9"	410 867 7700	846 Shady Oaks Rd	West River	45	
West	Parish	Backyard Boats	232	38°50'36.0"	76°30'41.1"	410 867 4800	4819 Woods Wharf Rd	Shady Side	59	<a href="http://www.backyardboats.com">www.backyardboats.com</a>
West	River Direct	West River Fuel Dock	BC11	38°50'35.4"	76°32'10.4"	410 867 1444	4801 Riverside Dr	Galesville	0	
West	River Direct	WestRhode Riverkeeper Pumpout Boat	BC12	38°50'39.3"	76°30'30.8"	443 221 5104	4800 Atwell Rd	Shady Side	0	<a href="http://www.westrhoderiverkeeper.org">www.westrhoderiverkeeper.org</a>
West	South	Chesapeake Yacht Club	245	38°50'15.5"	76°31'52.6"	410 867 1500	4943 Hine Ave	Shady Side	150	<a href="http://www.chesapeakeyachtclub.org">www.chesapeakeyachtclub.org</a>
West	Tenthouse	West River Yacht Harbour	231	38°50'37.5"	76°32'15.9"	301 672 3473	4801 Riverside Dr	Galesville	178	<a href="http://www.westriveryacht harbour.org">www.westriveryacht harbour.org</a>
West	Tenthouse	Harige Yacht Harbour	243	38°50'16.0"	76°32'35.3"	443 607 6306	4883 Church Lane	Galesville	250	<a href="http://www.harige yacht harbour.com">www.harige yacht harbour.com</a>
Rhode	Cadle	Cadle Creek Marina	219	38°52'59.1"	76°30'52.7"	410 798 1915	4159 Cadle Creek Rd	Edgewater	40	
Rhode	Cadle	Casa Rio Marina	216	38°53'13.8"	76°31'00.7"	410 798 4731	4079 Cadle Creek Rd	Edgewater	39	<a href="http://www.casariomarina.com">www.casariomarina.com</a>
Rhode	Whitmarsh	Rhode River Marina	211	38°53'32.1"	76°31'30.2"	410 798 1658	3932 Germantown Rd	Edgewater	108	<a href="http://www.rhoderiver marina.com">www.rhoderiver marina.com</a>
Rhode	Whitmarsh	Holiday Hill Marina	210	38°53'37.0"	76°31'17.6"	410 798 9499	3910 Calawasee Rd	Edgewater	68	<a href="http://www.holidayhill marina.com">www.holidayhill marina.com</a>
Rhode	Whitmarsh	Bluewater Marina	212	38°53'21.4"	76°31'20.2"	410 798 6968	1024 Carrs Wharf Rd	Edgewater	52	

**Table A.1.2: Marinas with Private Pump-outs Organized by River then Creek**

River	Creek	Marina	Map Code	Lat (N)	Long (W)	Phone #	Address	City	Slips	Marina Website
Patapsco	Bodkin	Bodkin Yacht Club	M257	39°46'38.1"	77°02'58.6"		8091 Bellhaven	Pasadena	60	<a href="http://www.bodkinyachtclub.com">www.bodkinyachtclub.com</a>
Magothy	Magothy Narrows	Gibson Island Marina	48	39°05'05.6"	76°25'53.3"	410 255 7632	420 The Causeway	Gibson Island	77	<a href="http://www.gibsonisland.com/club/yacht">www.gibsonisland.com/club/yacht</a>
White Hall Bay	Mill	Twin Harbors Community Association Marina	M65.1					Arnold		
Severn	Chase	Orchard Beach Marina	M564	39°00'57.0"	76°27'77.0"	410 269 5182	1643 Orchard Beach Rd	Annapolis	18	<a href="http://www.orchardbeachmarina.com">www.orchardbeachmarina.com</a>
Severn	Brewer	Pines OTS CyM	107	38°01'37.1"	76°30'18.6"		PO Box #19	Arnold	3	<a href="http://www.pinesonthesevern.org">www.pinesonthesevern.org</a>
Severn	Spa	Little John Marina	DNRI0	38°01'39.8"	76°32'37.9"	410 841 6497	134 Sherwood Forest Rd	Annapolis	0	
Severn	Spa	Annapolis Yacht Club	COA7	38°58'37.7"	76°29'05.7"	410 263 9279	2 Compromise St	Annapolis	75	<a href="http://www.annapolisyac.com">www.annapolisyac.com</a>
Severn	Spa	Eastport Yacht Club	M323			410 267 9549	317 First St	Annapolis		<a href="http://www.eastportyac.org">www.eastportyac.org</a>
Severn	Lake Ogleton	Bay Ridge Civic Association Association Marina	M19.1			410 991 3184	80 East Lake Dr	Annapolis	116	<a href="http://www.bay-ridge.org">www.bay-ridge.org</a>
Severn	Clements	Saefern Yacht Club	M472				1699 Saefern Way	Annapolis	150	<a href="http://www.saefern.org">www.saefern.org</a>
Chesapeake Bay	Fishing	Arundel OTB CyM	195	38°55'08.6"	76°27'48.9"	443 253 0596	PO Box 4665	Annapolis	12	<a href="http://www.arundelonthebay.org">www.arundelonthebay.org</a>
Chesapeake Bay	Oyster	Oyster Harbor Ramp	188	38°55'33.6"	76°27'56.0"	410 280 8999	PO Box 3174	Annapolis	0	<a href="http://www.oysterharbor.org">www.oysterharbor.org</a>
South	Duwall	Fishing Creek Farms CyM	183	38°55'38.9"	76°28'47.0"		1222 Cherry Tree Ln	Annapolis	26	<a href="http://www.fishingcreekfarm.org">www.fishingcreekfarm.org</a>
South	Ramsay Lake	South River Marina	205	38°54'02.7"	76°30'35.6"	410 798 6060	1061 Turkey Point Rd	Edgewater	48	<a href="http://www.southrivermarina.com/home2.html">www.southrivermarina.com/home2.html</a>
West	Parrish	Parrish Creek Marina	224	38°50'30.7"	76°30'43.9"	410 867 9550	1442 Ford Rd	Shady Side	141	<a href="http://www.clarkislandfishing.com">www.clarkislandfishing.com</a>
West	River Direct	Chalk Point Marine	246	38°50'10.3"	76°32'23.0"	410 991 9660	4916 W Chalk Point Rd	West River	30	<a href="http://www.chalkpointmarinewestriver.com">www.chalkpointmarinewestriver.com</a>
West	River Direct	Pirate's Cove Marina	233	38°50'35.7"	76°32'20.1"	410 867 3600	4781 Riverside Dr	Galesville	86	<a href="http://www.piratescoveand.com/marina.html">www.piratescoveand.com/marina.html</a>
West	Tenthouse	Hartge Yacht Yard	226	38°50'53.2"	76°32'36.3"	410 867 2188	4701 Woodfield Rd	Galesville	20	<a href="http://www.hartgeyard.com">www.hartgeyard.com</a>

## Appendix 2 Vessel Population Data

**Table A.2.1: DNR Registered Boat Count by Zip Code and Size**

Zip	Under_16_Feet	16_to_Under_26_Feet	26_to_Under_40_Feet	Over_40_Feet	Total_Registered_Boats_Per_Zip
20711	58	104	23	9	194
20714	7	5	5	0	17
20724	24	40	5	2	71
20733	62	109	26	7	204
20751	124	144	62	8	338
20754	6	7	7	0	20
20755	4	13	0	0	17
20758	16	26	10	2	54
20764	137	202	78	10	427
20776	53	76	22	8	159
20778	89	103	50	8	250
20779	51	66	40	9	166
20794	11	19	0	0	30
21012	451	545	276	47	1,319
21032	232	342	140	22	736
21035	123	172	78	9	382
21037	686	880	426	69	2,061
21054	74	116	31	7	228
21056	10	20	9	2	41
21060	319	443	116	17	895
21061	246	330	53	4	633
21076	61	59	13	3	136
21077	2	1	1	0	4
21090	86	106	25	3	220
21106	14	12	7	5	38
21108	141	214	75	9	439
21113	69	92	28	4	193
21114	96	102	55	1	254
21122	1,344	1,718	584	80	3,726
21123	6	5	3	1	15
21140	83	133	74	8	298
21144	163	199	33	8	403
21146	514	884	404	47	1,849
21225	69	86	4	2	161
21226	57	107	36	5	205
21240	0	2	1	1	4
21401	579	804	410	98	1,891
21402	11	13	9	1	34
21403	689	783	571	156	2,199
21404	13	8	2	4	27
21405	25	62	27	7	121
21409	377	572	251	53	1,253
<b>TOTALS</b>	<b>7,182</b>	<b>9,724</b>	<b>4,070</b>	<b>736</b>	<b>21,712</b>

**Table A.2.2: Documented Boats by Zip Code<sup>6</sup>**

Zip	Under_16_Feet	16_to_Under_26_Feet	26_to_Under_40_Feet	Over_40_Feet	Total_Documented_Per_Zip
20711	0	0	19	9	28
20714	0	1	20	17	38
20724	0	1	6	1	8
20733	0	1	25	10	36
20751	0	0	46	22	68
20754	0	1	39	7	47
20755	0	0	0	0	0
20758	0	1	10	8	19
20764	0	1	55	17	73
20776	0	1	18	9	28
20778	0	2	39	11	52
20779	0	1	41	16	58
20794	0	0	7	2	9
21012	0	3	191	63	257
21032	0	4	114	44	162
21035	0	1	63	19	83
21037	0	6	329	99	434
21054	0	0	28	20	48
21056	0	0	4	5	9
21060	0	4	56	53	113
21061	0	2	42	9	53
21076	0	1	14	9	24
21077	0	0	0	0	0
21090	0	0	15	2	17
21106	0	0	8	5	13
21108	0	2	67	16	85
21113	0	0	31	6	37
21114	0	3	70	14	87
21122	0	5	400	107	512
21123	0	0	4	2	6
21140	0	0	45	16	61
21144	0	1	38	11	50
21146	0	8	292	87	387
21225	0	0	6	3	9
21226	0	3	31	166	200
21240	0	0	0	0	0
21401	0	14	520	209	743
21402	0	0	8	5	13
21403	0	15	533	274	822
21404	0	1	5	4	10
21405	0	3	21	8	32
21409	0	5	173	81	259
TOTAL	0	91	3,433	1,466	4,990

**Table A.2.3: Maryland Transient Vessels<sup>7</sup>**

<b>Length (in feet)</b>	<b>Transients in MD</b>
<b>Power Boats <math>\leq</math> 29</b>	4,168
<b>Power Boats 30 – 39</b>	8,584
<b>Power Boats 40 – 49</b>	4,773
<b>Power Boats 50 – 59</b>	1,294
<b>Power Boats 60+</b>	475
<b>Sailboats <math>\leq</math> 39</b>	4,714
<b>Sailboats 40+</b>	2,149
<b>TOTAL</b>	26,157

## Appendix 3 Anne Arundel County Council Resolution 31-18

On 17 September 2018, the Anne Arundel County Council voted 6 to 1 in favor of Resolution 31-18 in support of the establishment of a No Discharge Zone as presented in this application.

Written testimony in support of Resolution 31-18 was submitted to the Council by the South River Federation, the Severn River Commission, the Severn River Association, the Magothy River Association, Back Creek Conservancy, West/Rhode Riverkeeper, and the Anne Arundel County Maritime Advisory Board.

Resolution 31-18 and supporting testimony is given on the following pages.

COUNTY COUNCIL OF ANNE ARUNDEL COUNTY, MARYLAND

Legislative Session 2018, Legislative Day No. 35

Resolution No. 31-18

Introduced by Mr. Peroutka, Chairman  
(by request of the County Executive)  
and by Mr. Trumbauer

By the County Council, September 4, 2018

1 RESOLUTION supporting the establishment of a “No Discharge Zone” for the  
2 Magothy River, Severn River, South River, Rhode River, West River, Stoney Creek,  
3 Bodkin Creek, Rock Creek, Podickory Creek, Sandy Point/Mezick Ponds, Whitehall Bay,  
4 Oyster Cove, and Fishing Creek

5  
6 WHEREAS, Section 312(f)(3) of the federal Clean Water Act (33 U.S.C. §  
7 1322(f)(3)) allows the State of Maryland to designate certain waters as “No  
8 Discharge Zones” in which the discharge of vessel sewage, whether treated or not,  
9 is prohibited; and

10  
11 WHEREAS, despite having more coastline than any county in the United States,  
12 only one “No Discharge Zone” exists in the waters of Anne Arundel County, that  
13 being approximately 3,500 acres in Herring Bay; and

14  
15 WHEREAS, the significant efforts of County government and its citizens to protect  
16 the waters of the County and restore water quality will be enhanced by the  
17 designation of additional waterways as a “No Discharge Zone” in the rivers, creeks,  
18 and bays of Anne Arundel County; and

19  
20 WHEREAS, the Back Creek Conservancy is an Annapolis-based non-profit citizen  
21 advocacy group dedicated to clean boating and improving the health of local  
22 waterways; and

23  
24 WHEREAS, the Back Creek Conservancy has invested much time and effort in the  
25 preparation of an Application for a State-Designated No Discharge Zone seeking  
26 “No Discharge Zone” designation for the Magothy River, Severn River, South  
27 River, Rhode River, West River, Stoney Creek, Bodkin Creek, Rock Creek,  
28 Podickory Creek, Sandy Point/Mezick Ponds, Whitehall Bay, Oyster Cove, and  
29 Fishing Creek, which would protect an additional 27,379 acres of waterway; and

30  
31 WHEREAS, the Application for a State-Designated No Discharge Zone dated June  
32 28, 2018, and prepared by the Back Creek Conservancy, is incorporated herein by  
33 reference as if fully set forth; and

34  
35 WHEREAS, the County Executive and the County Council support the efforts of  
36 the Back Creek Conservancy to designate additional waterways as a “No Discharge

1       Zone” and supports the establishment of a State-Designated “No Discharge Zone”  
2       in the County’s rivers, creeks, and bays; now, therefore, be it

3  
4       *Resolved by the County Council of Anne Arundel County, Maryland,* That it supports  
5 the establishment of a “No Discharge Zone”, in accordance with § 312(f)(3) of the federal  
6 Clean Water Act, for the Magothy River, Severn River, South River, Rhode River, West  
7 River, Stoney Creek, Bodkin Creek, Rock Creek, Podickory Creek, Sandy Point/Mezick  
8 Ponds, Whitehall Bay, Oyster Cove, and Fishing Creek, and the Back Creek Conservancy’s  
9 Application for a State-Designated No Discharge Zone, in furtherance thereof; and, be it  
10 further

11  
12       *Resolved,* That copies of this Resolution be sent to Steven R. Schuh, County Executive;  
13 Gavin Buckley, Mayor of the City of Annapolis; William Kardash, Severn River  
14 Commission; and the Back Creek Conservancy.



2822 Solomons Island Rd., Suite 202 ♦ Edgewater, MD 21037

410-224-3802 ♦ Fax: 410-224-0364

[www.southernriverfederation.net](http://www.southernriverfederation.net)

September 17, 2018

Anne Arundel County Council  
44 Calvert Street  
Annapolis, MD 21401

**RE: RESOLUTION 31-18**

Dear Councilman,

The South River Federation (SRF) writes to request your favorable vote on Resolution 31-18, supporting establishment of a "No Discharge Zone" in the rivers and creeks of Anne Arundel County.

SRF notes that establishment of a no discharge zone in Anne Arundel County rivers will have two primary benefits: First, it will reduce the amount of nitrogen in County waterways, thus preventing over-proliferation of the algae blooms that deprive the water of oxygen, prevent sunlight from reaching underwater grasses, and diminish the vitality and productivity of our rivers and creeks.

Second, the roll out of the no discharge zone regulation will provide a valuable education and outreach opportunity to the maritime community to discuss the bio-chemistry of our County's estuarine waterways. SRF hopes and believes that engagement with the boating community will encourage sound stewardship of our County's natural resources and produce a "ripple-effect" that will expand the positive impact of the designation beyond the nutrient reductions expected from the regulation itself.

Thank you for considering these comments, and SRF looks forward to helping implement the ultimate regulation from EPA in partnership with the County. Please do not hesitate to reach out with any questions.

Sincerely,

Jesse Iloff  
South RIVERKEEPER

**BOARD OF DIRECTORS**

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Don Santa, *Vice Chair*

Brenda Bouhwood, *Treasurer*

Lynn Johnson Langer, *Secretary*

Debra Bird

Dana Cole

David Cronin

Christian Ebington

Kevin Green

Paul Kaladas

Harman Kling

Beverly Marcus

Bob O'Dell

Dennis Trell

John Flood, *Emeritus*

Hank Libby, *Emeritus*

Kent McNew, *Emeritus*

Kincaid Potter, *Emeritus*



September 15, 2018

The Honorable Michael Peroutka, Chairman

Anne Arundel County Council 44 Calvert Street, Annapolis, MD

Re: SRC Support for Resolution 31-18, No Discharge Zone for Anne Arundel County Waterways

The Severn River Commission provides counsel and advice to the Anne Arundel County, the City of Annapolis, and the State of Maryland concerning matters related to the Severn River and its watershed.

In January 2017, the Commission unanimously recommended that the County Executive apply to the Environmental Protection Agency to expand the successful No Discharge Zone in Herring Bay, at the southern end of County waters.

The SRC's recommendation prompted the Back Creek Conservancy to prepare the application which is the basis for Resolution 31-18. The application fully reflects the SRC's 2017 recommendation and therefore receives our full support. Expanding the existing No Discharge Zone to the rest of Anne Arundel County's rivers, bays, and creeks will recognize the environmental accomplishments of the 59 public marinas with pump-out facilities and the urgent wish for clean water among the County's 21,000 boaters.

The Severn River Commission recommends adoption of Resolution 31-18.  
Respectfully yours,

Sincerely,

*Charlie Kreter*

**Chairman, Severn River Commission**

410-544-2903

410-320-3887 (cell)



# THE SEVERN RIVER ASSOCIATION

BOX 146 • ANNAPOLIS, MD 21404 • [severnriver.org](http://severnriver.org) • 443-569-3556 voicemail

January 23, 2017

#### Officers:

**President**  
Lynne Rockenbauch  
[president@severnriver.org](mailto:president@severnriver.org)  
**Treasurer**  
Liz Meadows  
[treasurer@severnriver.org](mailto:treasurer@severnriver.org)  
**Secretary**  
Bob vom Saal  
[secretary@severnriver.org](mailto:secretary@severnriver.org)

#### Member Communities

Admiral Heights Improv Assoc  
Amdenley Community Association  
Arden Civic Association  
Arnold Preservation Council  
Arnold on the Bay  
Back Creek Conservancy  
Bayberry Hills  
Bellevue Estates Home Assoc  
Belvoir Farms Homeowners Assoc  
Ben Osha Civic Association  
Bluff Point Community Assoc  
Bocher Landing Homeowners Assn  
Borum's Pond Improvement Assoc  
Burley Creek  
Carrillion Manor Improv Assoc  
Chartwell Garden Club  
Civic Association of Palmdale, Inc  
Down Property Owners Assoc  
Dyers Landing  
East Penderis Mount  
Eastport Civic Association  
Epping Forest Community Assoc  
Fairwind Beach Club, Inc.  
Ferry Farm Improvement Assoc  
Glen Olan Association, Inc  
Hawkins Cove  
Herald Harbor Citizens Assoc  
Hidden Point Rd. Association  
Hilly Point Community Assoc  
Hollyberry Garden Club  
Hollywood on Severn Improv Assoc  
Indian Landing Community Assn  
Kemington Community Assoc  
Kilmanauk Homeowners Assn  
Lake Forest Community Assoc  
Lindamoor Improvement Assoc  
Linstead Community Association  
Long Point on the Severn Civic Assn  
Mayfield Homeowners Assoc  
Meadows Residents Association  
Old Severn Park Improv Assoc  
Oyster Harbor Citizens Assoc  
Pines Community Improv Assoc  
Providence Community Association  
Riverside Manor Community Assoc  
Round Bay Community Association  
Saffern Saddle & Yacht Club  
Saltworks on Severn Citizens Assoc  
Severn Heights Improvement Assoc  
Severn View HOA  
Severna Forest Community Assoc  
Sherwood Forest Club Inc  
Shipley's Choice  
Spa Creek Conservancy  
Severn River Garden Club  
Severn Sailing Association  
St. Luke's Episcopal Church  
Unitarian Universalist Ch/Annapolis  
West Annapolis Civic Association  
West Severn Park Community Assn  
Whitshell Bay Conservancy  
Winchester on the Severn

**Annapolis (mayor and city council)**  
**Anne Arundel County (county executive and council)**

We are pleased to inform you that, by unanimous vote, the Board of Directors of the Severn River Association approved the following resolution on January 19, 2017. It references and supports recommendations you have already received from city and county advisory commissions (attached below).

### ***A Resolution on Marine Water Quality by the Severn River Association (SRA) Board of Directors***

*We acknowledge, and affirm our support of, efforts in Annapolis and Anne Arundel County to improve marine water quality. We endorse the following resolutions passed unanimously by advisory bodies to the City of Annapolis and to the County of Anne Arundel:*

- 1) The Annapolis Environmental Commission Resolution of November 5, 2014 concerning Measures to Improve Marine Water Quality in Annapolis Waters; and*
- 2) The Severn River Commission Resolution of December 12, 2016 concerning measures to improve marine water quality in County waters, including by applying for EPA designation of a new No Discharge Zone.*

*The SRA favors steps that will improve marine water quality, and recommends that the governments of the City of Annapolis and Anne Arundel County provide assistance and support to implement recommendations in those resolutions.*

The Severn River Association is available for consultation and support as you respond to the recommendations contained in those Resolutions, and we wish you well in implementing them.

Sincerely,

Lynne Rockenbauch  
President, Severn River Association

Attachments below: Resolutions by the Annapolis Environmental Commission and the Anne Arundel County Severn River Commission

## **No Discharge Zone Resolution from the Magothy River Association**

July 11, 2017

The Magothy River Association (MRA) by unanimous vote of the members of the Board makes the following statements and recommendations to the Anne Arundel County Executive:

The MRA argues that clean, clear, swimmable and fishable water in the Chesapeake Bay and its tributaries is a key resource for residents and visitors and is important to the economic viability of the region.

We believe that educating the public about the benefits of clean water and limiting polluting discharge into the waters of the County is a positive step and should be pursued.

The MRA further argues that sewage discharge from boats, whether partially treated or not, significantly degrades water quality due to the discharge of fecal microorganisms, solids, and nutrients such as nitrogen and phosphorus. Even partially treated sewage from boats reduces levels of dissolved oxygen and provides nutrients that support algal blooms. These impacts, in turn, reduce water clarity so that the growth of submerged aquatic vegetation is hindered.

By designating the Magothy River as a No Discharge Zone (NDZ), the public will become more aware of the importance of clean boating practices and of the County's commitment to improved quality of life for its citizens and the well-being of our waterways.

Many locations in the United States have already successfully implemented NDZs. Within the Chesapeake Bay region, Herring Bay has also implemented an NDZ; improved water quality and an increase in marine business have been noted. Another operates successfully in Maryland's Northern Coastal Bays, and yet another in the Chester River has been applied for and is pending final EPA approval.

Finally, the MRA recommends that the entire Magothy River and its tributaries be declared a No Discharge Zone and an application for this designation should be pursued. This designation shall apply to all vessels with permanently installed marine sanitation devices in the navigable tributaries and main stem of the Magothy River. Provisions governing NDZs that allow for reasonable phase-in periods should be considered for inclusion.

Respectfully submitted,

The Magothy River Association



---

Anne Arundel County Council

Public Hearing, 17 September 2018, on Resolution 31-18, No Discharge Zone

Testimony in favor of the resolution, by David Read Barker, Chairman,  
residing at 154 Quiet Waters Place, Annapolis

The first No Discharge Zone in the Chesapeake Bay was established in Herring Bay, in south county, in 2002. The past 16 years have shown this EPA designation to be a great success, measured by boater satisfaction, cleaner water, and habitat recovery. Consequently, in December 2016 the county's Maritime Industry Advisory Board recommended that the NDZ be expanded to other rivers, bays and creeks in the county, and the following month the Severn River Commission made the same recommendation.

Based on these resolutions, the Back Creek Conservancy took the initiative to prepare an application that covers 13 waterbodies throughout the county, covering more than 27,000 acres, with 59 marinas with pump-out facilities and more than 21,000 boats.

The testimony you have before you this evening in support of resolution 31-18 resoundingly disproves the assertion that there is some inevitable conflict between good business and environmental regulation. Both the maritime industry and environmental nonprofits working on the West and Rhode, South, Severn, and Magothy Rivers are on the same page: there is no need for boaters to discharge treated or untreated sewage into Anne Arundel County's waters.

By voting in favor of resolution 31-18, you will build on the county's legacy of environmental success and sustain the county's leadership to restore the Chesapeake Bay for safe and healthy boating, fishing, and swimming.

[www.backcreekconservancy.org](http://www.backcreekconservancy.org)

PO Box 5442, Annapolis, MD 21403

Jeff Holland, Riverkeeper  
West/Rhode Riverkeeper, Inc.  
637 Contees Wharf Road  
Edgewater, MD 21037  
jeff@westrhoderiverkeeper.org

September 17, 2018

Testimony before Anne Arundel County Council  
In support of Resolution 31-18, to establish a No Discharge Zone for Anne Arundel County

As the Riverkeeper for the West and Rhode Rivers, I heartily support the establishment of a No Discharge Zone for Anne Arundel County.

First, I want to stress that boaters are not the problem when it comes to pollution in the Chesapeake Bay watershed. As a lifelong boater, I know first-hand that boaters love the water and take pride in doing their part in keeping it clean. Establishing a No-Discharge Zone would be a way for this boating community to go the extra nautical mile to do just that: ensure that we safely dispose of the waste we produce, even the treated discharge that contains small amounts of nutrients. That's true devotion to clean water, and we expect nothing less from the boaters who love the Chesapeake Bay.

Secondly, I'd like to commend the Department of Natural Resources and in particular their Clean Marina Program. Nearly every marina has a pumpout station where boaters can safely and conveniently dispose of their waste. In addition, this program funds the pumpout boat that my organization operates every weekend from May through October. Last year, this one boat serviced more than 600 powerboats and sailboats in the West and Rhode Rivers alone and safely disposed of more than 16,000 gallons of raw sewage.

Again, we're not saying that these boaters would dump this waste overboard when nobody was looking; but thanks to DNR, we're providing a service that's so convenient that they don't even have to think of the alternative. The City of Annapolis and the Riverkeeper group on the Eastern Shore also have pumpout boats.

Pumpout stations are prevalent – you can visit any nearby marina or call a pumpout boat to come to your boat. Establishing No Discharge Zones in the county's rivers will impose no inconvenience on any suitably equipped boat, and will go a long way to prove our boating community's commitment to the restoration of the Chesapeake Bay.

The Anne Arundel County Maritime Advisory Board by unanimous vote of the members present at the meeting of October 24, 2016, makes the following statements and recommendations to the County Executive concerning the implementation of a No Discharge Zone in the waters of Anne Arundel County.

1. The Maritime Advisory Board believes that clean, clear, swimmable, and fishable water in the Chesapeake Bay and its tributaries is a crucial resource for citizens and an important selling point for marine businesses in the County and is a goal that should guide decisions on development around and discharge into the Chesapeake Bay and its tributaries.
2. The Board strongly believes that educating the public, including the boating public, about the benefits of clean water and limiting polluting discharge into the waters of Anne Arundel County is a positive step and should be pursued where possible.
3. The Board does not believe that boats and boaters significantly degrade the quality of the waters of Anne Arundel County, but we hope that by committing to improvement, others will follow suit.
4. In considering the question of whether to recommend the creation of a No Discharge Zone, the Maritime Advisory Board considered input from its own members, who represent a significant cross section of marine businesses and marinas in the County, and also heard from people outside the Board, including people that both oppose and support a No Discharge Zone.
5. Opponents of the plan believed that focusing on the area immediately around the City of Annapolis put an unfair burden on a small part of the County and its residents without sufficient showing that the concentrated burden would truly work to improve water quality.
6. Opponents of the plan were concerned that certain boats currently in existence and currently EPA compliant would no longer be able to legally operate in the No Discharge Zone and that this would impose an unfair burden on owners of those existing boats.
7. Opponents point out that there are sources of water pollution other than boats, including ones that may be more significant, and that clean-up efforts may be better directed elsewhere.
8. Proponents of a No Discharge Zone point out that it is a worthy goal to reduce bacteria and disease connected to fecal matter and untreated waste and that marine businesses and residents are negatively impacted each time a warning is necessary due to bacterial levels.
9. Proponents also point out that water quality, clarity and oxygenation is improved by lowering the amount of solids and nutrients that are deposited in the bay, and that this has

a positive impact on the enjoyment of the bay, the tourist industry, as well as Bay fisheries and habitat.

10. Proponents also note that many locations in the United States, including large parts of New England, have already successfully implemented No Discharge Zones. A No Discharge Zone has also been successfully implemented in Herring Bay, and Board members with direct knowledge of that body of water state that it has improved water quality without hurting business.
11. Having heard the discussions noted above, the Board makes the following recommendations:
  - a. Anne Arundel County would benefit from having its waters declared a No Discharge Zone and such an application should be pursued through appropriate authorities.
  - b. The No Discharge Zone should include more than the area around the City of Annapolis. It should extend to all of the parts of the County where there is sufficient pump out service to allow boats with holding tanks to be pumped out. Areas that do not have sufficient service should be urged to develop that service.
  - c. The No Discharge Zone should include all County waters, including the Patapsco, Magothy, Severn, South, West and Rhode Rivers so long as there is sufficient pump out service to support the boating community.
  - d. The application must be drafted to allow for existing vessels that do not have holding tanks to continue to operate.
  - e. The application must account for the fact that there are existing vessels that are EPA compliant and that could not be legally operated in a No Discharge Zone without extensive and expensive retrofitting. It is the recommendation of the Board that such vessels be allowed to continue to use a treated waste (Type I or II) system.

Respectfully submitted,

The Anne Arundel County  
Maritime Advisory Board

## Appendix 4 City of Annapolis Council Resolution 47-18

On 24 September 2018, the City of Annapolis Council voted 8 to 0 in favor of Resolution 47-18 in support of the establishment of a No Discharge Zone as presented in this application.

Written testimony in support of Resolution 47-18 was submitted to the Council by the South River Federation, the Severn River Commission, and the Severn River Association.

Resolution 47-18 and supporting testimony is given on the following pages.

1 **..Title**  
2 **No Discharge Zone** - For the purpose of supporting the establishment of a “No Discharge Zone”  
3 for the Annapolis waterways.

4 **..Body**

5 **CITY COUNCIL OF THE**  
6 *City of Annapolis*

7  
8 **Resolution 47-18**

9  
10 **Introduced by: Alderman Savidge, Alderman Arnett,**  
11 **Aldерwoman Henson, Aldерwoman Tierney, Alderman Rodriguez,**  
12 **Mayor Buckley and Alderman Paone**

13  
14  
15 **A RESOLUTION** concerning

16  
17 **No Discharge Zone**

18  
19 **FOR** the purpose of supporting the establishment of a “No Discharge Zone” for Annapolis  
20 waterways.

21  
22 **WHEREAS,** Section 312(f)(3) of the federal Clean Water Act (33 U.S.C. § 1322(f)(3)) allows  
23 the State of Maryland to designate certain waters as “No Discharge Zones” in  
24 which the discharge of vessel sewage, whether treated or not, is prohibited; and

25  
26 **WHEREAS,** the Severn River and its tributaries are classified as impaired by the  
27 Environmental Protection Agency and the State of Maryland; and

28  
29 **WHEREAS,** the significant efforts of City government and its citizens to protect the waters of  
30 the City and restore water quality will be enhanced by the designation of  
31 additional waterways as a “No Discharge Zone” in the rivers, creeks, and bays of  
32 Anne Arundel County, and

33  
34 **WHEREAS,** the Back Creek Conservancy is an Annapolis-based non-profit citizen advocacy  
35 group dedicated to clean boating and improving the health of local waterways;  
36 and

37  
38 **WHEREAS,** the Back Creek Conservancy has invested much time and effort in the preparation  
39 of an Application for a State-Designated “No Discharge Zone” seeking “No  
40 Discharge Zone” designation for the Magothy River, Severn River, South River,  
41 Rhode River, West River, Stoney Creek, Bodkin Creek, Rock Creek, Podickory  
42 Creek, Sandy Point/Mezick Ponds, Whitehall Bay, Oyster Cove, and Fishing  
43 Creek, which would protect an additional 27,379 acres of waterway; and

44  
45 **WHEREAS,** the Application for a State-Designated “No Discharge Zone” dated June 28, 2018,  
46 and prepared by the Back Creek Conservancy is adopted by reference herein; and

1  
2 **WHEREAS**, the Annapolis City Council supports the efforts of the Back Creek Conservancy to  
3 designate additional waterways as a “No Discharge Zone” and supports the  
4 establishment of a State-Designated “No Discharge Zone” in the City’s rivers,  
5 creeks, namely, Back Creek, College Creek, Spa Creek and Weems Creek, and  
6 tributaries into the Chesapeake.  
7

8  
9 **NOW, THEREFORE,**

10  
11 **BE IT RESOLVED BY THE ANNAPOLIS CITY COUNCIL** that the City of Annapolis  
12 supports the establishment by the State of Maryland of a “No Discharge Zone”, pursuant to  
13 Section 312(f)(3) of the federal Clean Water Act, for the Magothy River, Severn River, South  
14 River, Rhode River, West River, Stoney Creek, Bodkin Creek, Rock Creek, Podickory Creek,  
15 Sandy Point/Mezick Ponds, Whitehall Bay, Oyster Cove, and Fishing Creek, and the Back Creek  
16 Conservancy’s Application for a State-Designated No Discharge Zone, in furtherance thereof.  
17

18 **AND BE IT FURTHER RESOLVED BY THE ANNAPOLIS CITY COUNCIL** that a copy  
19 of this Resolution shall be sent to Steven R. Schuh, County Executive and William Kardash,  
20 Severn River Commission and the Back Creek Conservancy.  
21

22 **AND BE IT FURTHER RESOLVED BY THE ANNAPOLIS CITY COUNCIL** that this  
23 resolution shall take effect from the date of its passage.  
24

25 **EXPLANATION**

26 Underlining indicates matter added to existing law.  
27 [~~Strikethrough~~] indicates matter stricken from existing law.  
28

**Special Meeting of the Annapolis City Council**

**Monday, 24 September 2018, 7:00 p.m.**

**Comments by the Public**

**Jack Turner**

**Residing at \_\_\_\_\_ Cedar Ridge\_\_\_\_\_**

**Speaking on behalf of Lynne Rockenbauch, President, Severn River Association**

**In favor of R-47-18 No Discharge Zone- For the purpose of supporting the establishment of a "No Discharge Zone" for Annapolis waterways**

The Severn River Association supports Resolution 47-18 concerning the establishment of a "No Discharge Zone" for the Annapolis waterways. We hope the City of Annapolis will join Anne Arundel County in supporting this effort to designate certain waters as "No Discharge Zones" in which the discharge of vessel sewage, whether treated or not, is prohibited. We have found that many people from other areas already believe that Annapolis waters are a "No Discharge Zone" and are surprised that such a place has not joined other popular boating cities in this effort to keep our waterways free from human waste. Others have invested money in sewage treatment for their boats out of concern for the Severn and other waterways, but do not realize that most of these systems treat only the bacteria and not the nutrients. Excess nitrogen and phosphorus are key elements contributing to the impairment of the Severn and other Anne Arundel County rivers. Most of this comes from the land, but removing what comes from our many boats will certainly improve our waterways.

Please take advantage of Back Creek Conservancy's efforts to apply for a No Discharge Zone for county waters and let the boaters of the world know that Annapolis cares about clean water. Support Resolution 47-18.

[president@severnriver.org](mailto:president@severnriver.org)

## City Council Resolution 47-18 No Discharge Zone - 09.24.2018

I'm Jim Burdick 1719 cedar park Rd. Kurt Riegel & I are the two Annapolis delegates on the Anne Arundel County Severn River Commission. As City delegates, we are charged with informing and advising county council, city council the County Exec. & the Mayor on environmental matters as they concern the Severn River Watershed. I am speaking on behalf of the SRC this evening I'm a 35 year resident of the city, raised my family here & I live in Admiral Heights

I am here to express the SRC's full support of The NDZ. Many folks on the Severn River Commission, many folks on this Council, in this room in this town have spent countless hours to get us to this point. Led by David Barker, the Back Creek Conservatory has completed a very admirable piece of work which is NDZ application. The application will go to state DNR then to the EPA. The conservancy have learned the operational process, the application process & fully understand the need for support from the jurisdictions that the NDZ encompasses including the city. To this point - jurisdictional support, AA County Council has passed their Resolution in support of a countywide NDZ.

On behalf of the SRC We thank you in advance for your consideration and look forward to your unanimous support of this the NDZ res. 47-18

*Thank you!*



2822 Solomons Island Rd., Suite 202 ♦ Edgewater, MD 21037

410-224-3802 ♦ Fax: 410-224-0364

www.southriverfederation.net

September 24, 2018

Annapolis City Council  
160 Duke of Gloucester Street  
Annapolis, MD 21401

**RE: RESOLUTION R-47-18**

Dear Council,

The South River Federation (SRF) writes to request your favorable vote on Resolution R-47-18, supporting establishment of a "No Discharge Zone" in the rivers and creeks of Annapolis.

SRF notes that establishment of a no discharge zone in Anne Arundel County rivers (including the Severn and South rivers and their tidal creeks) will have two primary benefits: First, it will reduce the amount of nitrogen in City waterways, thus preventing over-proliferation of the algae blooms that deprive the water of oxygen, prevent sunlight from reaching underwater grasses, and diminish the vitality and productivity of our rivers and creeks.

Second, the roll out of the no discharge zone regulation will provide a valuable education and outreach opportunity to the maritime community to discuss the bio-chemistry of our City's estuarine waterways. SRF hopes and believes that engagement with the boating community will encourage sound stewardship of our City's natural resources and produce a "ripple-effect" that will expand the positive impact of the designation beyond the nutrient reductions expected from the regulation itself.

Thank you for considering these comments, and SRF looks forward to helping implement the ultimate regulation from EPA in partnership with the City. Please do not hesitate to reach out with any questions.

Sincerely,

Jesse Iloff  
South RIVERKEEPER

BOARD OF DIRECTORS

- Tom Reinert, CHAIR
- Don Santa, VICE CHAIR
- Brenda Boulwood, TREASURER
- Lynn Johnson Langer, SECRETARY
- Debra Bird
- Dana Cole
- David Cronin
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- Kevin Green
- Paul Kaladas
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- Beverly Marcus
- Bob O'Dell
- Dennis Treat
- John Flood, EMERITUS
- Hank Libby, EMERITUS
- Kent McNew, EMERITUS
- Kinsey Potter, EMERITUS

