

# AGENDA

## WORCESTER COUNTY COMMISSIONERS

Worcester County Government Center, Room 1101, One West Market Street, Snow Hill, Maryland 21863

**February 4, 2020**

### Item #

- 9:00 AM - Vote to Meet In Closed Session in Commissioners' Conference Room - Room 1103  
Government Center, One West Market Street, Snow Hill, Maryland
- 9:01 - Closed Session: Discussion regarding hiring a Landfill Operator I for the Solid Waste Division and a Roads Worker III for the Roads Division of Public Works, two (2) Building Housing and Zoning Inspectors for Development Review & Permitting, and other personnel matters; reviewing possible Security Enhancements for the Worcester County Government Center; receiving legal advice from Counsel; and performing administrative functions
- 10:00 - Call to Order, Prayer (Rev. Cynthia Bonneville), Pledge of Allegiance
- 10:01 - Report on Closed Session; Review and Approval of Minutes
- 10:05 - Presentation of Proclamation Recognizing February as Black History Month 1
- 10:10 - Chief Administrative Officer: Administrative Matters 2-15  
(Pending Board Appointments; Local Management Board 2020 Community Partnership Agreement; Request for Proposals - Adult Mental Health Targeted Case Management Services; Reimbursement of Local Income Taxes to the State due to the Wynne Case; FY20 Rural Legacy Grant Agreement; FY21 Rural Legacy Grant Application; Maryland Community Resilience Grant - Selsey Road Project Update and Title Services; FY21 Chesapeake and Coastal Grants Gateway Proposal; Draft Coastal Bays Watershed Plan - Assawoman Bay Subwatershed Plan; Staff Report on Request for Sewer Service to Hershey Property on Gum Point Road; Extension of Contract for Groundwater Monitoring and Analytical Services at Closed Landfills; Findings of Fact and Resolution Approving Rezoning Case No. 422 - M & G Route 50 Land; 2020 Census Outreach; Recommendations and Next Steps for Countywide Broadband Planning; and potentially other administrative matters)
- 10:20 -
- 10:30 - Mayor Rick Meehan, Ocean City: West Ocean City Ambulance Service 17
- 10:40 -
- 10:50 -
- 11:00 -
- 11:10 -
- 11:20 -
- 11:30 -
- 11:40 -
- 11:50 -
- 12:00 - Questions from the Press; County Commissioner's Remarks
- Lunch
- 1:00 PM - Chief Administrative Officer: Administrative Matters (If Necessary)
- 1:10 -
- 1:20 -
- 1:30 -

**AGENDAS ARE SUBJECT TO CHANGE UNTIL THE TIME OF CONVENING**

**Hearing Assistance Units Available** - see Kelly Shannahan, Asst. CAO.

Please be thoughtful and considerate of others.

**Turn off your cell phones & pagers during the meeting!**

# DRAFT

## Minutes of the County Commissioners of Worcester County, Maryland

January 21, 2020

Joseph M. Mitrecic, President  
Theodore J. Elder, Vice President  
Anthony W. Bertino, Jr.  
Madison J. Bunting, Jr.  
James C. Church  
Joshua C. Nordstrom  
Diana Purnell

Following a motion by Commissioner Bertino, seconded by Commissioner Church, with Commissioners Elder and Nordstrom temporarily absent, the Commissioners unanimously voted to meet in closed session at 9:00 a.m. in the Commissioners' Conference Room to discuss legal and personnel matters permitted under the provisions of Section 3-305(b)(1), (7), and (8) of the General Provisions (GP) Article of the Annotated Code of Maryland and to perform administrative functions, permitted under the provisions of Section GP 3-104. Also present at the closed session were Chief Administrative Officer Harold L. Higgins, Assistant Chief Administrative Officer Kelly Shannahan, County Attorney Maureen Howarth, incoming County Attorney Roscoe Leslie; Public Information Officer Kim Moses, and Human Resources Director Stacey Norton. Topics discussed and actions taken included: hiring Raheem Hammond and Dylan Connor as Correctional Officer Trainees for the Jail; promoting John "Alex" Webb from Database Administrator/Programming Trainee to Database Administrator/Programmer within Information Technology; agreeing to post to fill the positions of Tourism Director and Assistant Chief Administrative Officer; reviewing personnel changes in Environmental Programs; acknowledging the hiring of temporary Special Prosecutor Sharon Holback within the State's Attorney's Office and the promotion of Phyllis Yarbrow and Jocelyn Colbert from part-time Library Service Assistant I to full-time Library Services Assistant II; discussing pending litigation; receiving legal advice from counsel; and performing administrative functions, including: discussing potential board appointments and confirming an equivalent dwelling unit (EDU) allocation in the Mystic Harbour Service Area.

Following a motion by Commissioner Bertino, seconded by Commissioner Purnell, the Commissioners unanimously voted to adjourn their closed session at 9:52 a.m.

After the closed session, the Commissioners reconvened in open session. Commissioner Mitrecic called the meeting to order, and following a morning prayer by Reverend Dale Brown of the Community Church at Ocean Pines and pledge of allegiance, announced the topics discussed during the morning closed session.

The Commissioners reviewed and approved the open and closed session minutes of their January 7, 2020 meeting as presented.



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The Commissioners reviewed and discussed various board appointments.

Upon nominations by Commissioner Nordstrom, the Commissioners unanimously agreed to appoint Jeff Smith and to reappoint Patricia Tomasovic to the Library Board of Trustees for five-year terms each expiring December 31, 2024, and to appoint Commissioner Purnell's nominee, Vaughn White, to the Solid Waste Advisory Committee to replace Rodney Bailey for the remainder of a four-year term expiring December 31, 2021.

Pursuant to the request of Housing Program Administrator Jo Ellen Bynum and upon a motion by Commissioner Bertino, the Commissioners unanimously approved bid specifications for the rehabilitation of a single-family home in the Snow Hill area, which is to be funded through the County's new Community Development Block Grant (CDBG).

Pursuant to the request of Senior Budget Accountant Kim Reynolds and upon a motion by Commissioner Church, the Commissioners unanimously authorized Commission President Mitrecic to sign a letter supporting Diakonia, Inc.'s application for a Supportive Services for Veterans Families Program grant from the U.S. Department of Veterans Affairs.

Commission on Aging (COA) Executive Director Rob Hart met with the Commissioners to request their authorization for an over-expenditure of \$8,840 in the FY20 budget to provide transportation for senior citizens in northern Worcester County, specifically West Ocean City and Berlin, to COA daycare and medical appointments. Mr. Hart stated that Shore Transit, the County's current provider of these transportation services, is no longer able to provide sufficient service due to an increased demand for transportation services from the public, and the COA is now receiving multiple calls per day from senior citizens requesting transportation to and from their appointments. He stated that two COA mini vans and current part-time COA staff can be utilized at roughly four additional hours per day to provide transportation to and from these appointments because the COA currently runs a Community for Life Program in the north end of the County. In response to a question by Commissioner Elder, Mr. Hart stated that the COA could provide transportation at a lower cost than Shore Transit or another outside vendor could offer. He stated that, if the COA continues to provide this service, FY21 Statewide Specialized Transportation Assistance Program (SSTAP) funds that the County currently designates to Shore Transit could be used by the COA to cover these additional transportation costs.

With regard to concerns raised by Commissioners Elder and Mitrecic regarding the allocation of future SSTAP funding, Chief Administrative Officer Harold Higgins advised that this is a budgetary issue that will be presented to the Commissioners during FY21 budget deliberations. Commissioner Mitrecic stated that this program would be a huge undertaking and urged the COA to work to keep the Tri-County Council (TCC) of the Eastern Shore and Shore Transit involved, particularly with regard to scheduling.

In response to a question by Commissioner Bunting, Mr. Hart stated that the TCC has advised him that it is too costly for Shore Transit to provide service to the outlying areas; however, the COA has existing programs in that area that will allow them to provide transportation for seniors at a lower cost.

Following some discussion and upon a motion by Commissioner Elder, the Commissioners unanimously approved the requested \$8,840 over-expenditure in the FY20



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budget for the COA to supplement the services provided by Shore Transit.

Pursuant to the request of Budget Officer Kathy Whited and upon a motion by Commissioner Elder, the Commissioners unanimously lowered the privately-owned vehicle mileage reimbursement rate for County employees for County travel from \$0.58 to \$0.575, to match the mileage reimbursement rate for both the State of Maryland and the Internal Revenue Service (IRS).

Pursuant to the request of Assistant Chief Administrative Officer Kelly Shannahan and upon a motion by Commissioner Elder, the Commissioners unanimously approved their revised meeting and budget schedule for 2020. Mr. Shannahan recalled that the Commissioners previously revised the FY21 budget schedule to avoid afternoon budget work sessions, which would have conflicted with Commissioner Elder's school bus contracting schedule. However, now that Commissioner Elder has retired as a school bus contractor, he has agreed that afternoon budget work sessions would be preferable to meeting on the Wednesday morning following a regular meeting, and the schedule has been revised, with budget work sessions to take place as follows: all day on Tuesday, March 31, and Tuesday, May 12 (from 9:00 am to 4:00 pm), and in the afternoons (from 1:00 to 4:00 pm) after the Commissioners' regularly-scheduled meetings on Tuesday, April 14, and Tuesday, May 19, thereby eliminating three additional meeting days.

Environmental Programs Director Bob Mitchell met with the Commissioners to recommend providing FY20 Maryland Agricultural Land Preservation Foundation (MALPF) matching funds of \$66,000, which represent an estimate of Agricultural Land Transfer Tax (ALTT) of \$15,000 for FY20 and a County General Fund cash match in FY21 of \$51,000. Mr. Mitchell advised that Worcester County's certification entitles the County to retain 75% instead of 33% of the ALTT. Mr. Mitchell stated that there is uncertainty with respect to estimating annual ALTT, how many easements the State will offer in the year, what property owners will accept State offers, and the ultimate matching fund level the County will have for easements. However, he noted that, if the County provides more than the minimum contribution of \$16,000, the County will receive more than a 50% return on this investment. He further stated that, with matching funds from the State, perhaps the County would be able to purchase one to two additional easements in this funding cycle.

Following some discussion and upon a motion by Commissioner Nordstrom, the Commissioners voted 6-1, with Commissioner Elder voting in opposition, to approve local matching funds of \$66,000 for the FY20 Maryland Agricultural Land Preservation Foundation Program.

Pursuant to the request of Economic Development Director Kathryn Gordon and upon a motion by Commissioner Nordstrom, the Commissioners unanimously approved out-of-state travel for Economic Development Deputy Director Lachelle Scarlato to attend the International Council of Shopping Centers (ICSC) Global Retail Real Estate Convention (RECON) from May 17-19, 2020 in Las Vegas, Nevada at a cost of \$2,755 for registration, flights, lodging and meals.

Commissioner Bunting requested Ms. Gordon provide the Commissioners with any documentation that may exist with regard to the benefits of attending this conference. Ms.



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Gordon agreed, noting that in addition to the networking opportunities and professional development/career-building opportunities, this conference will allow Ms. Scarlato to market commercial retail sites with access to water and sewer in the County to quality retailers.

The Commissioners met with Development Review and Permitting Director Ed Tudor to discuss the Town of Berlin's proposed Annexation Petition. Mr. Tudor informed the Commissioners that the Town of Berlin is proposing to annex approximately 2.4 acres located on the southerly side of U.S. Route 50 to the east of Seahawk Road and identified on Tax Map 25 as Parcels 408 (Myers Trust) and 430 (Two Farms, Inc.). Mr. Tudor stated that the properties proposed for annexation are zoned C-2 General Commercial District under County zoning, and the town is proposing to rezone the properties to B-2 Shopping District upon annexation. He explained that pursuant to the provisions of Section 4-416 of the Land Use Article of the Annotated Code of Maryland the annexed land cannot allow uses substantially different than those in the zoning category of the County for a period of five years after the annexation, unless the County consents to the proposed rezoning upon annexation. However, the proposed annexation is consistent with the land uses recommended by the Comprehensive Plan and with existing zoning and land use in the area. Therefore, no action is required by the County Commissioners.

In response to a question by Commissioner Bunting, Mr. Tudor confirmed that the town will provide public sewer service to the properties.

Following some discussion and upon a motion by Commissioner Elder, the Commissioners unanimously agreed to send a letter to the Town of Berlin concurring with the rezoning upon annexation of the subject properties.

Pursuant to the recommendation of Development Review and Permitting Director Ed Tudor, in response to a request made by Carpenter Engineering, LLC, on behalf of their client, Sea Oaks Village, LLC, and upon a motion by Commissioner Purnell, the Commissioners unanimously adopted Resolution No. 20-2, approving a proposal for approved private roads and the associated road construction standards for Sea Oaks Village Residential Planned Community (RPC) on Stephen Decatur Highway (MD Rt. 611). Mr. Tudor stated that the project contains two proposed roads to be known as Oak Leaf Lane, which is 619 feet in length, and Sea Oaks Lane, which is 1,887 feet in length and comprised of 1,373 feet in the residential section and 514 feet in the commercial section.

In response to a question by Commissioner Bunting, Public Works Director John Tustin stated that he concurs with this request, noting that both proposed roads meet and in some respects exceed County road construction standards.

Pursuant to the request of Mr. Tustin and upon a motion by Commissioner Bertino, the Commissioners unanimously approved Change Order No. 1 with Whiting-Turner for the Ocean Pines Branch Library building envelope and heating, ventilation, and air conditioning (HVAC) renovation project. Mr. Tustin stated that the project was completed, leaving a surplus of \$15,077, thus reducing the final contract sum to \$1,239,562.

The Commissioners conducted a public hearing on Rezoning Case No. 422 for an



application submitted by Joseph E. Moore, attorney, on behalf of M and G Route 50 Land, LLC, which seeks to rezone approximately 18.65 acres of land located on the south side of U.S. Rt. 50 and north side of Old Ocean City Boulevard (MD Rt. 346) west of Main Street (MD Rt. 818) near Berlin, and more specifically identified on Tax Map 20 as Parcels 47 and 318, from A-1 Agricultural to C-2 General Commercial Zoning District. Staff members present at the hearing were Development Review and Permitting Director (DRP) Ed Tudor and DRP Deputy Director Phyllis Wimbrow. County Attorney Maureen Howarth swore in those individuals who planned to give testimony during the hearing. Mr. Tudor reviewed the application, which received a favorable recommendation from the County Planning Commission. Ms. Wimbrow stated that according to the application for rezoning, the applicants' claim as the basis for their rezoning request was that there was a mistake in the existing zoning. She stated that all of Parcel 318 and most of Parcel 47 are located within the Growth Area category, while the most easterly portion of Parcel 47 is within the Agricultural Land Use Category of the County Comprehensive Plan. She then entered the Planning Commission's Findings of Fact into the record, noting that the petitioned area is within a designated Growth Area and at a gateway location for Berlin, an area of significantly increased population over the last 30 years and adjacent to a power substation, rendering the site unattractive for residential use, too small and irregularly-shaped for farming with today's large equipment, and is more appropriate for commercial zoning. Furthermore, the Planning Commission concluded that for these reasons a change in zoning would be more desirable in terms of the objectives of the Comprehensive Plan.

Mr. Moore stated that this site is the westerly gateway to Berlin, and is bounded by highways on two sides and Delmarva Power's electric substation on the east side, resulting in an isolated property that is not suited for residential or agricultural use due to its size and shape. He stated that, while the Comprehensive Plan indicates that there is an overabundance of commercially zoned lands, this parcel is not related to the abundance of commercial zoning situated 4.8 miles to the east of Berlin along U.S. Rt. 50, and the closest commercially zoned property is at the intersection of U.S. Rt. 50 and MD Rt. 818 (North Main Street). He further noted that, because the population of Berlin has grown by 48% since the 2000 Census, the petitioned area is better suited for commercial uses to serve this population, and that MD Rt. 346 would act as a service road since the property is denied access to U.S. Rt. 50. He concluded that, though an annexation agreement could not be reached between the property owner and the Town of Berlin due to the substantial cost to connect the property to public sewer, the town has no objection to the rezoning. Therefore, he urged the Commissioners to find that there is a mistake in the existing zoning and that C-2 zoning would be more appropriate in terms of the goals and objectives of the Comprehensive Plan.

Mr. Moore proceeded to question his four witnesses.

Attorney Hugh Cropper, IV, a private citizen who owns six agricultural properties, leases farms, engages in some farming activities, and has served as a land use attorney for 31 years, agreed that the site cannot be farmed with large farming equipment due to its odd shape, small size, and the location of power lines and ditches. He stated that a farmer would only till the site to keep the weeds down or for insurance purposes. He concluded that it was a mistake to retain the A-1 zoning during the 2009 comprehensive rezoning for these reasons and stated that commercial use is the only logical use for the petitioned area.

Betty Tustin of the Traffic Group stated that a traffic study concluded that the proposed



commercial use of the petitioned area will have no adverse impact on future traffic during any peak hours, with a Level of Service A being maintained on all roadways and at both proposed entrances.

John Salm of J. W. Salm Engineering, Inc. stated that without public sewer there is limited on-site wastewater disposal, which would limit the overall amount of commercial use; however, between the existing and potential on-site septic capacity of the property, adequate septic service is available to serve commercial uses, such as a convenience store or warehouse/storage, on the petitioned area.

Chris McCabe, environmental consultant and owner of Coastal Compliance Solutions, advised that, while much of the soils in the petitioned area are primarily hydric soils, there are still areas to develop for reasonable commercial use of the property. He further stated that there is an area of nontidal wetlands for which they have applied and received conceptual approval from the Maryland Department of the Environment (MDE) for proposed nontidal wetland impacts of less than 5,000 square feet.

In response to a question by Commissioner Bertino, Mr. Moore acknowledged that the Comprehensive Plan calls for growth areas to be annexed by the incorporated towns, but that it also recognizes that properties within growth areas cannot always be successfully or satisfactorily annexed, as occurred in this case in which he worked with the town for over a year to resolve the issue of public sewer service to the site. Mr. Moore advised that the County Commissioners may still permit development in these growth areas without annexation.

In response to a question by Commissioner Bunting, Environmental Programs Director Bob Mitchell noted that the existing well and septic, which have been abandoned and would require permitting to be re-established, have a maximum flow capacity of 600 gallons per day (gpd) for each property, with a total potential onsite capacity of 1,200 gpd if the two prior septic areas are protected, though total future onsite capacity is unknown at this point without confirmed seasonal testing.

There being no further public comment, Commissioner Mitrecic closed the public hearing.

Upon a motion by Commissioner Church, the Commissioners conceptually adopted the Planning Commission's Findings of Fact and approved the rezoning from A-1 to C-2, based on a mistake in the existing zoning.

The Commissioners met with Information Technology Director Brian Jones and Joanne Hovis, President of CTC Technology & Energy of Maryland to discuss the findings of the Worcester County Broadband Feasibility Study.

Ms. Hovis reviewed a PowerPoint that included the following: CTC's findings and recommendations based on a six-month study that included assessing the existing fiber/cable infrastructure, identifying where gaps exist in which there currently is no fiber/cable broadband infrastructure to serve the needs of residents, businesses, and institutions, and a high-level design and cost estimate and potential grants and loans that might support the expansion of broadband services. She stated that CTC solutions are based on the private sector, rather than the County, becoming an internet service provider, but with the understanding that the County, State, and federal government engagement will be part of the solution to make it economically viable for the private sector to fill those infrastructure gaps. She noted that the lack of infrastructure has to



do with the lack of economic viability, which is the story of every single county in the United States, all of which have areas of low density where there are broadband gaps, with the exception of counties that are entirely cities, like San Francisco and Washington, D.C. She then reviewed overall strategies and solutions from a technology standpoint (including designed fiber and fixed wireless networks), and strategies for the County to work with a private sector partner, and state, federal partners, which offer funding programs that represent important opportunities to help reduce infrastructure costs through a combination of State and federal grants and low interest loans, and with a potential County contribution. Ms. Hovis stated that infrastructure is economically viable in high-density locations where the cost to build on a per-customer basis is much lower and potential revenues are much higher because there are so many potential customers. Therefore, a lack of adequate broadband infrastructure is a persistent rural problem. She stated that, based on a desk and field study analysis, about 6,400 homes and businesses in Worcester County are not served by infrastructure that meets the federal definition of broadband (25 Mbps down/3 Mbps up), meaning high-speed access to the internet, which is increasingly a foundational element of economic activity, civic engagement, education, and healthcare, is not available to those homes and businesses. She then reviewed maps identifying the unserved areas of the County, and discussed a series of design solutions, noting that wireless service appears to be a lower cost option up front to build, but fixed fiber, which will require a capital investment of approximately \$46.7 to \$49.7 million, is the holy grail of infrastructure because once built it will be there in perpetuity and allow for increased speeds over time as the market demands it. Thus, fixed fiber is a better and lower-cost, long-term solution than wireless, which would require costly, wholesale replacement every five to 10 years due to exposure to the elements and because the technology continues to advance at a rapid pace, making decade-old wireless equipment mostly obsolete.

With regard to moving forward, Ms. Hovis stated that the State of Maryland has made a commitment to partner with the counties and appropriated funds to solve the lack of broadband in low-density areas; and the federal government currently offers multiple programs, including the U.S. Department of Agriculture's (USDA) ReConnect grant and loan program and Federal Communications Commission grants and low-interest loans, creating opportunities to reduce the net cost of providing broadband in unserved areas of the County. She further stated that the County has a potentially strong potential partner in Choptank Electric Cooperative, which is seeking to cover much of the unserved areas with broadband service and are particularly well positioned to apply for federal funding. She stated that CTC has met with and had very positive engagement with Choptank, which is very interested in solving this problem in all nine counties on the Lower Eastern Shore of Maryland. She further noted that Choptank is asking the General Assembly to adopt legislation that would make it possible for the cooperative to go into this business, and if given the opportunity to do so under State law, will likely become very competitive bidders for federal funding to be available later in 2020, provided that the County supports Choptank as a private sector partner.

Ms. Hovis then reviewed the challenges to obtaining the federal funding, specifically Bloosurf, an existing wireless provider recognized as the rural utility service (RUS) borrower in the County. She stated that Bloosurf was awarded \$3.2 million in USDA Broadband Initiatives Program (BIP) grant and loan funds in 2010 for service across the County and won the Connect America Fund II (CAF II) auction for additional portions of the County, and those areas are



technically ineligible for ReConnect funding; and though the CAF II exclusion will continue, the ReConnect is a protected status that is expected to expire in 2021. She stated that this represents a significant obstacle, not to State funding, but to federal funding opportunities, and the County would be required to challenge this existing federal grantee's service claims to be eligible to receive certain grants and loans, as federal funding cannot support a second federal grantee in these areas of the County. She stated that the data suggests that the company is not delivering on the coverage it has reported and which is identified on the federal maps. She stated that, because Bloosurf is here in the County, another provider would not be eligible to apply for federal funds. With respect to future funding sources, she stated that both grants are likely to be renewed because the State and federal governments recognize the scope of the problem and how much money it will take to solve the problem countrywide.

Ms. Hovis suggested the following multi-year strategy to collaborate with partners and to make substantial progress over time to comprehensively extend broadband service throughout the County: collaborate with private sector partners to apply for State and federal broadband grants, noting that the State program does not place restrictions on geographic areas; pursue State funding immediately, and encourage Comcast, ThinkBig, and others to apply; ReConnect will be difficult because of protected status areas; Engage with Choptank on Rural Digital Opportunity Fund (RDOF) funding opportunities; partner with ThinkBig on State grant application, possibly ReConnect; encourage Comcast to apply for a State broadband grant; and explore opportunities to support fixed wireless providers as a last resort.

In response to concerns raised by Commissioner Bertino, Mr. Jones advised that, if the County or its partner's application for federal funds is denied on the grounds that the County already has an RUS provider, the County can challenge that decision by requiring Bloosurf to prove that it is providing the coverage identified on existing federal maps.

In response to a question by Commissioner Bunting, Ms. Hovis stated that all of CTC's anecdotal data suggests that the wireless service provided by Bloosurf is spotty at best, and it would likely require a huge expense for the company to construct the additional towers needed to resolve this issue.

Commissioner Elder stated that most of the unserved population of the County reside in his district, and it is imperative to extend broadband to these areas. In response to questions by Commissioner Elder, Ms. Hovis stated that the federal funding available would allow County partners to begin to move forward with plans to extend fiber to the rural areas. In response to questions by Assistant Chief Administrative Officer Kelly Shannahan, Ms. Hovis stated that the RUS protection was based on a 2010 USDA grant that will not expire until 2021, unless the County can show that the promised coverage level is not there. Thus, it would be very helpful to know exactly what Bloosurf's true performance levels are and to partner with the State to test that performance. She further noted that Bloosurf is a likely competitor for the next round of federal funding, and it is in the County's best interest to support one or more bidders, such as Choptank or Comcast, that will be able to install the fiber needed to extend broadband to the unserved areas.

Commissioner Nordstrom stated that broadband is critical to success in southern Worcester County to attract businesses that support NASA's Wallops Island Flight Facility, and he offered his support for developing the needed infrastructure to provide reliable broadband services in Worcester County.



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Following much discussion and upon a motion by Commissioner Bertino, the Commissioners unanimously requested CTC to provide them with a proposal to test the existing wireless broadband services provided by Bloosurf in their federal award areas in the County and for staff to present them with a plan at their next meeting to outline the steps the County needs to take to facilitate the extension of broadband to the unserved areas of the County.

Pursuant to the request of Public Works Director John Tustin and upon a motion by Commissioner Bertino, the Commissioners unanimously approved the one-year contract extension with Atlantic Pumping at a cost of \$20,724 for portable restroom services throughout the County at the Solid Waste facilities, firing range, and County parks and boat ramps.

Pursuant to the request of Public Information Officer Kim Moses and Recycling Manager Mike McClung and upon a motion by Commissioner Nordstrom, the Commissioners voted 6-0-1, with Commissioner Mitrecic abstaining from the vote due to a potential conflict of interest, to authorize Commission President Mitrecic to sign the contract between D3 and the County Commissioners, which includes fees totaling \$1,995 for video production and billboard design, along with an administrative fee of \$475 for the Keep Worcester Clean (KWC) campaign. Ms. Moses explained that the billboards, proposed to launch in early February/March, and the commercials, proposed to begin running in early April/May, will both run for approximately six months to provide the widest possible coverage. She further noted that staff will work with D3 to produce the video and billboard graphics based on KWC campaign initiatives and will determine the actual advertising costs and request the Commissioners' approval for the final advertising purchases at a future meeting.

Commissioner Nordstrom stated that at their February 5, 2019 meeting the Commissioners were presented with a petition requesting the establishment of a second early voting site in the Pocomoke area of the County, which would provide greater access to voting and voter registration, eliminating for some the impracticality of a 30-minute ride from the south end of the County to the existing early voting site in Berlin. However, the current law establishing the parameters of early voting sites in Maryland require the site to remain open all week, which is impractical, restrictive, and, ultimately, too expensive for a county with a smaller population. Therefore, he urged his fellow Commissioners to petition the State to amend the existing law to state that, "In addition to the required main early voting site - operating under established parameters - counties with a population of less than 125,000 registered voters shall have the option of opening additional sites for no fewer than two consecutive days at a length of no less than six consecutive hours on either day, encompassed in the established time frame for early voting."

In response to a question by Commissioner Bunting, Assistant Chief Administrative Officer Kelly Shannahan stated that the County requested the Board of Elections provide them with a cost estimate to open a second early voting site for a period of only two days, but that they have yet to receive the requested information. However, Mr. Shannahan stated that, based on the estimated cost of a full-time early voting polling place at \$116,709 and extrapolating the per-day costs of rent and manpower, the operational costs could likely be reduced by \$50,000 to operate a second early voting site for only two days. Mr. Shannahan further noted that in an email from



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Board of Elections Director Patricia Jackson dated January 15, 2020 the Maryland Association of Election Officials (MAEO) Legislative Committee chairs are against any legislation regarding part-time early voting for the following reasons: Maryland elections are run on uniformity; there is already legislation allowing for an additional center for the full duration of early voting; and voter confusion is a big factor in having things set up for brief periods of time that are not consistent.

Following some discussion, a motion by Commissioner Nordstrom to send a letter to the Eastern Shore Delegation requesting that they introduce legislation during the 2020 General Assembly session that would allow counties with populations of less than 125,000 registered voters to have the option to open additional early voting sites for no fewer than two consecutive days at a length of no less than six consecutive hours each day failed 3-4, with Commissioners Mitrecic, Nordstrom, and Purnell voting in favor of the motion and Commissioners Bertino, Bunting, Church, and Elder voting in opposition. Commissioner Bunting stated that he was not prepared to consider this request without a detailed cost estimate.

Pursuant to the request of County Attorney Roscoe Leslie and upon a motion by Commissioner Bertino, the Commissioners unanimously named Mr. Leslie as the attorney to prosecute County civil infractions, pursuant to Annotated Code of Maryland, Local Government Article 11-206.

Upon a motion by Commissioner Bunting, the Commissioners unanimously directed Information Technology Director Brian Jones to research the possibility of transitioning from regularly revised to permanent cell phone passwords.

Commissioner Nordstrom thanked Public Works Roads Division staff for their quick response to a constituent concern to clean up trash dumped illegally along the road in the south end of the County.

Commissioner Elder left the meeting.

In response to a question by Commissioner Bertino, Development Review and Permitting Director Ed Tudor agreed to present a plan at their February 4, 2020 meeting to further increase security in the Worcester County Government Center atrium area.

Commissioner Bertino also requested a list of expenditures between \$10,000 and \$25,000 over the last year for which competitive bidding was not required.

In response to a question by Commissioner Bertino, Assistant Chief Administrative Officer Kelly Shannahan stated that, in accordance with the lease agreement between the Ocean Pines Association (OPA)(landlord) and the County Commissioners (tenant) dated December 23, 1997, County staff has drafted a letter to the OPA Board of Directors requesting approval to use a small office (approximately 175 square feet) in the Ocean Pines Branch Library as a satellite facility for the Worcester County Treasurer's Office to collect payments and receive applications submitted by the public.

In response to a prior inquiry by Commissioner Bunting, Mr. Higgins advised that the



# DRAFT

County Health Department does not pay rent to the County for use of the Isle of Wight facility, but the County does receive income by way of permit fees for inspections performed by the Health Department staff at the Isle of Wight office.

The Commissioners recognized outgoing County Attorney Maureen Howarth for her service to the County and wished her well as she assumes her new position as partner with Ayres, Jenkins, Gordy, & Almand in Ocean City.

The Commissioners answered questions from the press, after which they adjourned at 12:07 p.m. to meet again on February 4, 2020.



OFFICE OF THE  
COUNTY COMMISSIONERS

## Worcester County

GOVERNMENT CENTER  
ONE WEST MARKET STREET • ROOM 1103

SNOW HILL, MARYLAND

21863-1195

### PROCLAMATION

1  
HAROLD L. HIGGINS, CPA  
CHIEF ADMINISTRATIVE OFFICER  
ROSCOE R. LESLIE  
COUNTY ATTORNEY

**WHEREAS**, National Association for the Advancement of Colored People (NAACP) leader Carter G. Woodson originally founded "Negro History Week" in 1926, which was expanded to Black History Month in 1976, to reverse the omission of African Americans in U.S. history and the central role they played in shaping this nation; and

**WHEREAS**, that history would be incomplete without recognizing exemplary African-Americans from Worcester County who championed human rights and unity, including the Reverend Charles A. Tindley who penned the famous gospel hymn "We Shall Overcome," the anthem for the Civil Rights Movement, and Isaiah "Uncle Zear" Fassett who was born into slavery in Berlin in 1844, gained his freedom, and fought in the Union Army.

**NOW, THEREFORE**, we the County Commissioners of Worcester County, Maryland, proclaim February 2020 as **Black History Month** in Worcester County, and we invite the public to tour the Government Center where African-American panels highlight the lives and sacrifices of African Americans who helped shape the Eastern Shore.

Executed under the Seal of the County of Worcester, State of Maryland, this 4<sup>th</sup> day of February, in the Year of Our Lord Two Thousand and Twenty.



\_\_\_\_\_  
Joseph M. Mitrecic, President

\_\_\_\_\_  
Theodore J. Elder, Vice President

\_\_\_\_\_  
Anthony W. Bertino, Jr.

\_\_\_\_\_  
Madison J. Bunting, Jr.

\_\_\_\_\_  
James C. Church

\_\_\_\_\_  
Joshua C. Nordstrom

\_\_\_\_\_  
Diana Purnell



2

COMMISSIONERS  
JOSEPH M. MITRECIC, PRESIDENT  
THEODORE J. ELDER, VICE PRESIDENT  
ANTHONY W. BERTINO, JR.  
MADISON J. BUNTING, JR.  
JAMES C. CHURCH  
JOSHUA C. NORDSTROM  
DIANA PURNELL

OFFICE OF THE  
COUNTY COMMISSIONERS

HAROLD L. HIGGINS, CPA  
CHIEF ADMINISTRATIVE OFFICER  
ROSCOE R. LESLIE  
COUNTY ATTORNEY

## Worcester County

GOVERNMENT CENTER  
ONE WEST MARKET STREET • ROOM 1103

SNOW HILL, MARYLAND

21863-1195

January 24, 2020

TO: Worcester County Commissioners  
FROM: Karen Hammer, Office Assistant IV  
SUBJECT: Pending Board Appointments - Terms Beginning January 1, 2020

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Attached, please find copies of the Board Summary sheets for all County Boards or Commissions (14) which have current or upcoming vacancies (25 total). They are as follows: Commission on Aging Board (2), Agricultural Preservation Advisory Board (2), Building Code Appeals Board (1), Ethics Board (1), Local Development Council for the Ocean Downs Casino (4), Lower Shore Workforce Development Board (1), Planning Commission (1), Property Tax Assessment Appeal Board (1, with 3 nominees to Governor for each seat = 6 total nominees), Social Services Board (1), Solid Waste Advisory Committee (5), Tourism Advisory Committee (1), Water and Sewer Advisory Councils - Mystic Harbour (2) and West Ocean City (2), and the Commission For Women (1). I have circled the members whose terms have expired or will expire on each of these boards.

Please see the attached requests, nominations and letters of interest for the following Boards:

**Local Development Council for the Ocean Downs Casino**

Requesting two replacements, 1 - Mr. Charles Dorman (Elder);  
1- Mr. Rod Murray (Bunting) - page 9

**Solid Waste Advisory Committee**

Request to appoint Mr. Hal Adkins to replace Steve Brown (retiring) - page 17

**Tourism Advisory Board:**

One letter of interest - Renee M. Seiden - page 19

Most of these Boards and Commissions specify that current members' terms will expire on December 31<sup>st</sup>. Current members will continue to serve beyond their term until they are either reappointed or a replacement is named. Please consider these reappointments or new appointments during February.



## **Pending Board Appointments - By Commissioner**

**District 1 - Nordstrom** All District Appointments Received. Thank you!

**District 2 -** All District Appointments Received. Thank you!

**District 3 - Church** p. 15 - Solid Waste Advisory Committee ( Bob Augustine)- 4-year  
p. 22 - Water and Sewer Advisory Council - Mystic Harbour (Joseph Weitzell -  
Mystic Harbor and Bob Hunt - Deer Point) - 4-year  
p. 23 - Water and Sewer Advisory Council - West Ocean City (Deborah Maphis  
and Gail Fowler)- 4 year

**District 4 - Elder** p. 8 - Local Development Council for the Ocean Downs Casino (Charlie  
Dorman) - 4yr.

**District 5 - Bertino** p. 15 - Solid Waste Advisory Committee (James Rodenberg)- 4 yr.

**District 6 - Bunting** p. 8 - Local Development Council for the Ocean Downs Casino (Rod Murray)-  
4yr.  
p. 18 - Tourism Advisory Committee (Isabel Morris) - 4-year  
p. 24 - Commission for Women (Bess Cropper) - 4 year

**District 7 - Mitrecic** p. 6 - Building Code Appeals Board (Bill Paul) - 4-year  
p. 7 - Ethics Board (Frank Knight) - 4-year  
p. 8 - Local Development Council for Ocean Downs (Michael Donnelly) - 4-year  
p. 11 - Planning Commission (Jay Knerr) 5 -year  
p. 13 - Social Services Advisory Board (Maria Campione-Lawrence)- 3yr.

### **All Commissioners**

p. 5 - (2) Agricultural Preservation Advisory Board (Bill Bruning, Curt Lambertson) - 4-year  
p. 8 - (1) Local Development Council for Ocean Downs Casino (Mark Wittmyer - At-Large - business or  
institution representative in immediate proximity to Ocean Downs) - 4-year  
p. 10 - (1) Lower Shore Workforce Development Board (Business Representative - Berlin area) - 4-year  
p. 12 - (1) Property Tax Assessment Appeal Board (Gary M. Flater - Snow Hill Area - alternate) - must  
submit 3 nominees for each seat to Governor for his consideration in making these  
appointments 5yr.  
p. 15 - (3) Solid Waste Advisory Committee (Michael Pruitt - Town of Snow Hill; Jamey Latchum -  
Town of Berlin and Steve Brown - Town of Ocean City) 4 yr.  
p. 22 - (2) Water and Sewer Advisory Council - Mystic Harbour (Joseph Weitzell - Mystic Harbor and  
Bob Hunt - Deer Point) - 4-year  
p. 23 - (2) Water and Sewer Advisory Council - West Ocean City (Deborah Maphis and Gail Fowler)-  
4yr

### **All Commissioners (Awaiting Nominations)**

p. 3 - (2) Commission on Aging Board (Cynthia Malament- Berlin, Lloyd Parks - Girdletree) - self-  
appointed by Commission on Aging & confirmed by County Commissioners- 3-year  
p. 15 - (1) Solid Waste Advisory Committee (Hal Adkins for The Town of Ocean City)- 4yr.

## COMMISSION ON AGING BOARD

Reference: By Laws of Worcester County Commission on Aging  
- As amended July 2015

Appointed by: Self-Appointing/Confirmed by County Commissioners

Function: Supervisory/Policy Making

Number/Term: Not less than 12; 3 year terms, may be reappointed  
Terms Expire September 30

Compensation: None

Meetings: Monthly, unless otherwise agreed by a majority vote of the Board

Special Provisions: At least 50% of members to be consumers or volunteers of services provided by Commission on Aging, with a representative of minorities and from each of the senior centers; one County Commissioner; and Representatives of Health Department, Social Services and Board of Education as Ex-Officio members

Staff Contact: Worcester County Commission on Aging, Inc. - Snow Hill  
Rob Hart, Executive Director (410-632-1277)

### Current Members:

<u>Member's Name</u>	<u>Resides/Represents</u>	<u>Years of Term(s)</u>
Cynthia Malament	Berlin	07-10-13-16, 16-19
Lloyd Parks	Girdletree	08-11-14-17, 17-20
Clifford Gannett	Pocomoke City	*12-14-17, 17-20
James Covington	Pocomoke City	*18-20
Bonita Ann Gisriel	Ocean City	*18-20
Carolyn Dryzga	Ocean Pines	*18-20
Tommy Tucker	Snow Hill	09-12-15-18, 18-21
Tommy Mason	Pocomoke	15-18, 18-21
Helen Whaley	Berlin	*16-18, 18-21
Rebecca Cathell	Agency - Maryland Job Service	
Lou Taylor	Agency - Worcester County Board of Education	
Robert Baldwin	Agency - Worcester County Department of Social Services	
Rebecca Jones	Agency - Worcester County Health Department	
Madison J. Bunting, Jr.	Worcester County Commissioners' Representative	
Fred Grant	Snow Hill	*15-16, 16-19, 19-22
Joyce Cottman	Berlin	*16, 16-19, 19-22



Prior Members:

Since 1972

Virginia Harmon  
Maude Love  
Dr. Donald Harting  
John C. Quillen  
Violet Chesser  
William Briddell  
Harrison Matthews  
John McDowell  
Mildred Brittingham  
Maurice Peacock  
Father S. Connell  
Rev. Dr. T. McKelvey  
Samuel Henry  
Rev. Richard Hughs  
Dorothy Hall  
Charlotte Pilchard  
Edgar Davis  
Margaret Quillen  
Lenore Robbins  
Mary L. Krabill  
Leon Robbins  
Claire Waters  
Thelma Linz  
Oliver Williams  
Michael Delano  
Father Gardiner  
Iva Baker  
Minnie Blank  
Thomas Groton III  
Jere Hilbourne  
Sandy Facinoli  
Leon McClafin  
Mabel Scott  
Wilford Showell  
Rev. T. Wall  
Jeaninne Aydelotte  
Richard Kasabian  
Dr. Fred Bruner  
Edward Phillips  
Dorothy Elliott  
John Sauer  
Margaret Kerbin  
Carolyn Dorman  
Marion Marshall  
Dr. Francis Ruffo  
Dr. Douglas Moore  
Hibernia Carey  
Charlotte Gladding  
Josephine Anderson  
Rev. R. Howe  
Rev. John Zellman  
Jessee Fassett  
Delores Waters  
Dr. Terrance A. Greenwood  
Baine Yates  
Wallace T. Garrett  
William Kuhn (86-93)  
Mary Ellen Elwell (90-93)  
Faye Thornes

Mary Leister (89-95)  
William Talton (89-95)  
Sunder Henry (89-95)  
Josephine Anderson  
Saunders Marshall (90-96)  
Louise Jackson (93-96)  
Carolyn Dorman (93-98)  
Constance Sturgis (95-98)  
Connie Morris (95-99)  
Jerry Wells (93-99)  
Robert Robertson (93-99)  
Margaret Davis (93-99)  
Dr. Robert Jackson (93-99)  
Patricia Dennis (95-00)  
Rev. C. Richard Edmund (96-00)  
Viola Rodgers (99-00)  
Baine Yates (97-00)  
James Shreeve (99-00)  
Tad Pruitt (95-01)  
Rev. Walter Reuschling (01-02)  
Armond Merrill, Sr. (96-03)  
Gene Theroux  
Blake Fohl (98-05)  
Constance Harmon (98-05)  
Catherine Whaley (98-05)  
Wayne Moulder (01-05)  
Barbara Henderson (99-05)  
Gus Payne (99-05)  
James Moeller (01-05)  
Rev Stephen Laffey (03-05)  
Anne Taylor (01-07)  
Jane Carmean (01-07)  
Alex Bell (05-07)  
Inez Somers (03-08)  
Joanne Williams (05-08)  
Ann Horth (05-08)  
Helen Richards (05-08)  
Peter Karras (00-09)  
Vivian Pruitt (06-09)  
Doris Hart (08-11)  
Helen Heneghan (08-10)  
Jack Uram (07-10)  
Robert Hawkins (05-11)  
Dr. Jon Andes  
Lloyd Pullen (11-13)  
John T. Payne (08-15)  
Sylvia Sturgis (07-15)  
Gloria Blake (05-15)  
Dr. Jerry Wilson (Bd. of Ed.)  
Peter Buesgens (Social Services)  
Deborah Goeller (Health Dept.)  
George "Tad" Pruitt (05-17)  
Bonnie C. Caudell (09-17)  
Larry Walton (13-18)

## AGRICULTURAL PRESERVATION ADVISORY BOARD

Reference: PGL Agriculture 2-504.1, Annotated Code of Maryland

Appointed by: County Commissioners

Functions: Advisory  
Advise the County Commissioners and State Agricultural Preservation Foundation on establishment of agricultural districts and priorities for purchase of easements; promote preservation of agriculture in the County.

Number/Term: 7/4 years\*\*\*  
Terms expire December 31st

Compensation: \$50 per meeting (policy)

Meetings: As Needed

Special Provisions: 4 members to be owner-operators of commercial farms  
Membership limited to two consecutive full terms

Staff Contact: Katherine Munson, Dept. of Environmental Programs (410-632-1220)

Current Members: (O-O = Commercial Farm Owner-Operator)

<u>Member's Name</u>	<u>Nominated By</u>	<u>Resides</u>	<u>Terms (Year)</u>
Bill Bruning (O-O)	Elder	D-2, Snow Hill	11-15, 15-19
Curt Lambertson	Elder	D-4, Snow Hill	15-19
Kelley Gravenor	Elder	D-4, Snow Hill	*14-16, 16-20
Glen Holland (O-O)	Lockfaw	D-1, Pocomoke	13-17, 17-21
Kathy Drew	Bunting	D-6, Bishopville	** 06-09-13-17, 17-21
Ed Phillips (O-O)	Elder	D-4, Whaleyville	05-10-14-18, 18-22
Alan Hudson (O-O)	Elder	D-4, Berlin	14-18, 18-22

### Prior Members:

Norman Ellis	Frank Baker (98-01)
Richard Bradford	Ed Anderson (98-03)
Charles Fulton	Robert Gray (00-05)
Elmer Hastings	Orlando Bishop (01-06)
David Stevens	Roger Richardson (96-07)
Curtis Shockley	Anne Hastings (06-11)
Gerald Redden	Earl Ludey (07-13)
William Sirman, Jr.	George Lee Clayville (00-14)
Harold Purnell	Sandra Frazier (03-14)
Chauncy Henry (96-97)	Donnie Powell (06-15)
Lieselotte Pennewell (93-98)	
Carlton Magee (90-00)	
Harry Mitchell (90-00)	

\* = Appointed to fill an unexpired term

\*\* = Appointed to partial term to create proper staggering of terms

\*\*\*=Membership expanded from 5 to 7 members and terms reduced from 5 to 4-years each in 2006



## BUILDING CODE APPEALS BOARD

Reference: PGL - Public Safety Article - Section 12-501 - 12-508 - Annotated Code of Maryland  
COMAR 05.02.07 (Maryland Building Performance Standards)  
- International Building Code, International Residential Code

Appointed by: County Commissioners

Function: Quasi-Judicial  
Hear and decide upon appeals of the provisions of the International Building Code (IBC) and International Residential Code for one- and two-family dwellings (IRC)

Number/Term: 7/4-year terms  
Terms expire December 31

Compensation: \$50 per meeting (by policy)

Meetings: As Needed

Special Provisions: Members shall be qualified by reason of experience, training or formal education in building construction or the construction trades.

Staff Contact: Edward A. Tudor, Director  
Development Review & Permitting (410-632-1200, ext. 1100)

### Current Members:

<u>Member's Name</u>	<u>Nominated By</u>	<u>Resides</u>	<u>Years of Term(s)</u>
Bill Paul	D-7 - Mitrecic	Ocean Pines	15-19
Kevin Holland	D-1 - Lockfaw	Pocomoke	96-04-08-12-16, 16-20
James Spicknall	D-5 - Bertino	Ocean Pines	04-08-12-16, 16-20
Mike Poole	D-6 - Bunting	Bishopville	17-21
Mark Bargar	D-4 - Elder	Berlin	14-18, 18-22
Jim Wilson	D-3 - Church	Berlin	02-06-10-14-18, 18-22
Elbert Davis	D-2 - Purnell	Snow Hill	*03-03-07-11-15-19, 19-23

### Prior Members:

Robert L. Cowger, Jr. (92-95)  
Charlotte Henry (92-97)  
Robert Purcell (92-98)  
Edward DeShields (92-03)  
Sumei Prete (97-04)  
Shane C. Spain (03-14)  
Dominic Brunori (92-15)  
Richard P. Mueller (98-17)

## ETHICS BOARD

Reference: Public Local Law, Section CG 5-103

Appointed by: County Commissioners

Function: Advisory

Maintain all Ethics forms; develop procedures and policies for advisory opinions to persons subject to the Ethics Law and for processing complaints alleging violations of the Ethics Law; conduct a public information program regarding the purpose and application of the Ethics Law; annually certify compliance to the State; and recommend any changes to the Commissioners in order to comply with State Ethics Law.

Number/Term: 7/4 years  
Terms expire December 31<sup>st</sup>

Compensation: \$50 per meeting

Meetings: As Necessary

Special Provisions:

Staff Contact: Roscoe Leslie, County Attorney (410-632-1194)

Current Members:

<u>Member's Name</u>	<u>Nominated By</u>	<u>Resides</u>	<u>Years of Term(s)</u>
Frank Knight	D-7, Mitrecic	Ocean City	*14-15, 15-19
Joseph Stigler	D-4, Elder	Berlin	16-20
Jeff Knepper	D-5, Bertino	Ocean Pines	16-20
Bruce Spangler	D-3, Church	Berlin	*02-05-09-13-17, 17-21
David Deutsch	D-6, Bunting	Ocean Pines	17-21
Faith Mumford	D-2, Purnell	Snow Hill	14-18, 18-22
Mickey Ashby	D-1, Nordstrom	Pocomoke	14-18, 18-22

Prior Members: (Since 1972)

J.D. Quillin, III  
Charles Nelson  
Garbriel Purnell  
Barbara Derrickson  
Henry P. Walters  
William Long  
L. Richard Phillips (93-98)  
Marigold Henry (94-98)  
Louis Granados (94-99)  
Kathy Philips (90-00)  
Mary Yenney (98-05)  
Bill Ochse (99-07)  
Randall Mariner (00-08)

Wallace D. Stein (02-08)  
William Kuhn (90-09)  
Walter Kissel (05-09)  
Marion Chambers (07-11)  
Jay Knerr (11-14)  
Robert I. Givens, Jr. (98-14)  
Diana Purnell (09-14)  
Kevin Douglas (08-16)  
Lee W. Baker (08-16)  
Richard Passwater (09-17)



**LOCAL DEVELOPMENT COUNCIL  
FOR THE OCEAN DOWNS CASINO**

Reference: Subsection 9-1A-31(c) - State Government Article, Annotated Code of Maryland

Appointed by: County Commissioners

Function: Advisory  
Review and comment on the multi-year plan for the expenditure of the local impact grant funds from video lottery facility proceeds for specified public services and improvements; Advise the County on the impact of the video lottery facility on the communities and the needs and priorities of the communities in the immediate proximity to the facility.

Number/Term: 15/4 year terms; Terms Expire December 31

Compensation: None

Meetings: At least semi-annually

Special Provisions: Membership to include State Delegation (or their designee); one representative of the Ocean Downs Video Lottery Facility, seven residents of communities in immediate proximity to Ocean Downs, and four business or institution representatives located in immediate proximity to Ocean Downs.

Staff Contacts: Kim Moses, Public Information Officer, 410-632-1194  
Roscoe Leslie, County Attorney, 410-632-1194

**Current Members:**

<u>Member's Name</u>	<u>Nominated By</u>	<u>Represents/Resides</u>	<u>Years of Term(s)</u>
Michael Donnelly	Dist. 7 - Mitrecic	Resident - Ocean City	*16-19
Mark Wittmyer	At-Large	Business - Ocean Pines	15-19
Charlie Dorman	Dist. 4 - Elder	Resident - Snow Hill	12-16, 16-20
Rod Murray °	Dist. 6 - Bunting	Resident - Ocean Pines	*09-12-16, 16-20
Mayor Rick Meehan °	At-Large	Business - Ocean City	*09-12-16, 16-20
Mayor Gee Williams °	Dist. 3 - Church	Resident - Berlin	09-13-17, 17-21
Bob Gilmore	Dist. 5 - Bertino	Resident - Ocean Pines	*19-21
David Massey °	At-Large	Business - Ocean Pines	09-13-17, 17-21
Bobbi Sample	Ocean Downs Casino	Ocean Downs Casino	17-indefinite
Cam Bunting °	At-Large	Business - Berlin	*09-10-14-18, 18-22
Matt Gordon	Dist. 1 - Nordstrom	Resident - Pocomoke	19-22
Mary Beth Carozza		Maryland Senator	14-18, 18-22
Wayne A. Hartman		Maryland Delegate	18-22
Charles Otto		Maryland Delegate	14-18, 18-22
Roxane Rounds	Dist. 2 - Purnell	Resident - Berlin	*14-15-19, 19-23

*Non Attendance*

**Prior Members:**

Since 2009

J. Lowell Stoltzfus ° (09-10)	Todd Ferrante ° (09-16)
Mark Wittmyer ° (09-11)	Joe Cavilla (12-17)
John Salm ° (09-12)	James N. Mathias, Jr. ° (09-18)
Mike Pruitt ° (09-12)	Ron Taylor ° (09-14)
Norman H. Conway ° (09-14)	James Rosenberg (09-19)
Michael McDermott (10-14)	
Diana Purnell ° (09-14)	
Linda Dearing (11-15)	

\* = Appointed to fill an unexpired term/initial terms staggered  
° = Charter Member

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TEL: 410-632-1194  
FAX: 410-632-3131  
EMAIL: [kmoses@co.worcester.md.us](mailto:kmoses@co.worcester.md.us)  
WEB: [www.co.worcester.md.us](http://www.co.worcester.md.us)

Council Members

David Massey, Chair  
Cam Bunting, Vice Chair  
Pat Schrawder for Senator Mary  
Beth Carozza  
Delegate Wayne Hartman  
Delegate Charles Otto  
Mayor Richard Meehan  
Ivy Wells for Mayor Gee  
Williams  
Bobbi Sample  
Charlie Dorman  
Mark Wittmyer  
Michael Donnelly  
Matt Gordon  
Rodney Murray  
Roxane Rounds



Local Development Council  
For Ocean Downs Video Lottery Facility  
C/O WORCESTER COUNTY ADMINISTRATION  
GOVERNMENT CENTER  
ONE WEST MARKET STREET, ROOM 1103  
SNOW HILL, MARYLAND

Roscoe Leslie  
County Attorney  
Kim Moses  
Administrative Staff

January 27, 2020

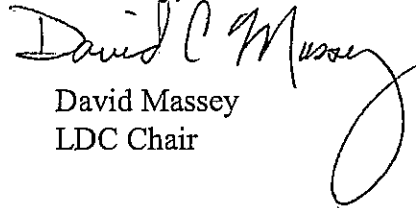
Commission President Joe Mitrecic  
Worcester County Government Center  
One West Market Street, Room 1103  
Snow Hill, Maryland 21863

Dear Commission President Mitrecic:

I am contacting you on behalf of the Local Development Council (LDC) for the Ocean Downs Video Lottery Facility to request that the Commissioners appoint replacements for the following two LDC members: District 4 - former Snow Hill Mayor Charles Dorman, and District 6 - Rod Murray.

The LDC meets in January and September each year, and the last meeting that Mr. Dorman and Mr. Murray attended took place on January 22, 2018. Both members missed the September 24, 2018 and January 14 and September 16, 2019 meetings. Though the LDC has made multiple attempts to contact both Mr. Dorman and Mr. Murray to determine whether they would like to continue to serve on the LDC, we have received no response from either member. We thank you in advance for your consideration of this request.

Sincerely,

  
David Massey  
LDC Chair

DM/KAM



## LOWER SHORE WORKFORCE DEVELOPMENT BOARD

(Previously Private Industry Council Board - PIC)

Reference: Workforce Innovation and Opportunity Act of 2014, Section 107

Appointed by: County Commissioners

Functions: Advisory/Regulatory  
Provide education and job training opportunities to eligible adults, youth and dislocated workers who are residents of Somerset, Wicomico and Worcester counties.

Number/Term: 26 - 5 Worcester County, 11 At-Large (by Tri-County Council), 10 Other  
2, 3 or 4-year terms; Terms expire September 30

Compensation: None

Meetings: Quarterly (March, June, September, December) on the 2<sup>nd</sup> Wednesday

Special Provisions: Board must be at least 51% business membership.  
Chair must be a businessperson

Staff Contact: Lower Shore Workforce Alliance  
Becca Webster, Workforce Director (410-341-3835, ext 6)  
American Job Center, 31901 Tri-County Way, Suite 215, Salisbury, MD 21804

Current Members (Worcester County - also members from Wicomico, Somerset and Tri-County Council):

<u>Name</u>	<u>Resides/Agency</u>	<u>Term</u>	<u>Representing</u>
(Vacant)	(Berlin area)	17-21	Business Rep.
Walter Maizel	Bishopville	*12, 12-16, 16-20	Private Business Rep.
Robert "Bo" Duke	Ocean City	*17, 17-21	Business Rep.
Melanie Pursel	Ocean City	18-22	Business Rep.
Jason Cunha	Pocomoke	*16-19, 19-23	Business Rep.

Prior Members: Since

Baine Yates	Bruce Morrison (05-08)
Charles Nicholson (98-00)	Margaret Dennis (08-12)
Gene Theroux (97-00)	Ted Doukas (03-13)
Jackie Gordon (98-00)	Diana Nolte (06-14)
Caren French (97-01)	John Ostrander (07-15)
Jack Smith (97-01)	Craig Davis (13-17)
Linda Busick (98-02)	Donna Weaver (08-17)
Edward Lee (97-03)	Geoffrey Failla (15-18)
Joe Mangini (97-03)	
Linda Wright (99-04)	
Kaye Holloway (95-04)	
Joanne Lusby (00-05)	
William Greenwood (97-06)	
Gabriel Purnell (04-07)	
Walter Kissel (03-07)	
Heidi Kelley (07-08)	

## PLANNING COMMISSION

Reference: Public Local Law ZS §1-112

Appointed by: County Commissioners

Functions: Advisory/Regulatory

Make investigations and recommendations regarding zoning text and map amendment applications; recommend conditional rezoning; make recommendations to the Board of Zoning Appeals; review public projects, proposed facility development plans, regulations and standards; review and approve site plans; review and make recommendations regarding residential planned communities; review and approve subdivision plats.

Number/Term: 7/5 years; Terms expire December 31st

Compensation: \$50 per meeting (policy)

Meetings: 1 regular meeting per month; additional meetings held as necessary

Special Provisions: Historically - one member from each Commissioner District, plus two At-Large members; one member per district once expanded to seven districts.

Staff Contact: Department of Development Review & Permitting  
Edward A. Tudor, Director (410-632-1200, ext. 1100)

### Current Members:

<u>Member's Name</u>	<u>Nominated By</u>	<u>Resides</u>	<u>Years of Term(s)</u>
Jay Kner	D-7, Mitrecic	Berlin	14-19
Jerry Barbierri	D-1, Lockfaw	Pocomoke	*12-15, 15-20
Mike Diffendal	D-3, Church	Berlin	10-15, 15-20
Richard L. Wells	D-6, Bunting	Bishopville	11-16, 16-21
Brooks Clayville	D-4, Elder	Snow Hill	02-07-12-17, 17-22
Marlene Ott	D-5, Boggs	Ocean Pines	08-13-18, 18-23
Betty M. Smith	D-2, Purnell	Berlin	*07-09-14-19, 19-24

### Prior Members: Since 1972

David L. Johnson  
N. Paul Joyner  
Daniel Trimper, IV  
Hugh F. Wilde  
Warren Frame  
Roland E. Powell  
Harry Cherrix  
W. David Stevens  
Granville Trimper  
J. Brad Aaron  
Lester Atkinson  
Paul L. Cutler  
Edward R. Bounds  
Edward Phillips  
Vernon McCabe

R. Blaine Smith  
Edward A. Tudor  
Terry Bayshore  
Larry Widgeon  
Charles D. "CD" Hall  
Ernest "Sandy" Coymann  
Rev. Donald Hamilton  
Dale Stevens  
Marion L. Butler, Sr.  
Ron Cascio (96-97)  
Louie Paglierani (90-99)  
Robert Hawkins (96-99)  
Ilia Fehrer (94-99)  
Rob Clarke (99-00)  
W. Kenny Baker (97-02)

James Jarman (99-03)  
Harry Cullen (00-03)  
Ed Ellis (96-04)  
Troy Purnell (95-05)  
Larry Devlin (04-06)  
Tony Devereaux (03-07)  
Wilbert "Tom" Pitts (99-07)  
Doug Slingerland (07-08)  
Carolyn Cummins (90-94, 99-09)  
Madison "Jimmy" Bunting (05-10)  
Jeanne Lynch (06-11)  
H. Coston Gladding (96-12)  
Wayne A. Hartman (09-14)

\* = Appointed to fill an unexpired term



## PROPERTY TAX ASSESSMENT APPEAL BOARD

Reference: Annotated Code of Maryland, Tax-Property Article, §TP 3-102

Appointed by: Governor (From list of 3 nominees submitted by County Commissioners)  
- Nominees must each fill out a resume to be submitted to Governor  
- Nominations to be submitted 3 months before expiration of term

Function: Regulatory  
- Decides on appeals concerning: real property values and assessments, personal property valued by the supervisors, credits for various individuals and groups as established by State law, value of agricultural easements, rejection of applications for property tax exemptions.

Number/Term: 3 regular members, 1 alternate/5-year terms  
Terms Expire June 1st

Compensation: \$15 per hour (maximum \$90 per day), plus travel expenses

Meetings: As Necessary

Special Provisions: Chairman to be designated by Governor

Staff Contact: Department of Assessments & Taxation- Janet Rogers (410-632-1196)  
Ext:112

Current Members:

Gary M. Flater (Alternate)	Snow Hill	13-18	Resigned
Steven W. Rakow	Ocean Pines	*19-22	
Arlene C. Page	Bishopville	18-23	
Martha Bennett	Berlin	19-24	

C) = Chairman

Prior Members: Since 1972

Wilford Showell	Delores W. Groves (96-99)
E. Carmel Wilson	Mary Yenney (98-03)
Daniel Trimper, III	Walter F. Powers (01-04)
William Smith	Grace C. Purnell (96-04)
William Marshall, Jr.	George H. Henderson, Jr. (97-06)
Richard G. Stone	Joseph A. Calogero (04-09)
Milton Laws	Joan Vetare (04-12)
W. Earl Timmons	Howard G. Jenkins (03-18)
Hugh Cropper	Robert D. Rose (*06-17)
Lloyd Lewis	Larry Fry (*10-14 alt)(14-18)
Ann Granados	
John Spurling	
Robert N. McIntyre	
William H. Mitchell (96-98)	

\* = Appointed to fill an unexpired term

Updated: May 21, 2019  
Printed: January 24, 2020

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## SOCIAL SERVICES ADVISORY BOARD

Reference: Human Services Article - Annotated Code of Maryland - Section 3-501

Appointed by: County Commissioners

Functions: Advisory  
Review activities of the local Social Services Department and make recommendations to the State Department of Human Resources.  
Act as liaison between Social Services Dept. and County Commissioners.  
Advocate social services programs on local, state and federal level.

Number/Term: 9 to 13 members/3 years  
Terms expire June 30th

Compensation: None - (Reasonable Expenses for attending meetings/official duties)

Meetings: 1 per month (Except June, July, August)

Special Provisions: Members to be persons with high degree of interest, capacity & objectivity, who in aggregate give a countywide representative character.  
Maximum 2 consecutive terms, minimum 1-year between reappointment  
Members must attend at least 50% of meetings  
One member (ex officio) must be a County Commissioner  
Except County Commissioner, members may not hold public office.

Staff Contact: Roberta Baldwin, Director of Social Services - (410-677-6806)

### Current Members:

<u>Member's Name</u>	<u>Nominated By</u>	<u>Resides</u>	<u>Years of Term(s)</u>
Maria Campione-Lawren	D-7, Mitrecic	Ocean City	16-19
Nancy Howard	D-2, Purnell	Ocean City	(09-16), 17-20
Cathy Gallagher	D-5, Bertino	Ocean Pines	*13-14-17, 17-20
Faith Coleman	D-4, Elder	Snow Hill	15-18, 18-21
Harry Hammond	D-6, Bunting	Bishopville	15-18, 18-21
Diana Purnell	ex officio - Commissioner		14-18, 18-22
Wayne Ayer	D-1, Nordstrom	Pocomoke City	*19-21
Voncelia Brown	D-3, Church	Berlin	16-19, 19-22
Mary White	At-Large	Berlin	*17-19, 19-22



## SOCIAL SERVICES BOARD

(Continued)

### Prior Members: (Since 1972)

James Dryden	Naomi Washington (01-02)
Sheldon Chandler	Lehman Tomlin, Jr. (01-02)
Richard Bunting	Jeanne Lynch (00-02)
Anthony Purnell	Michael Reilly (00-03)
Richard Martin	Oliver Waters, Sr. (97-03)
Edward Hill	Charles Hinz (02-04)
John Davis	Prentiss Miles (94-06)
Thomas Shockley	Lakeshia Townsend (03-06)
Michael Delano	Betty May (02-06)
Rev. James Seymour	Robert "BJ" Corbin (01-06)
Pauline Robertson	William Decoligny (03-06)
Josephine Anderson	Grace Smearman (99-07)
Wendell White	Ann Almand (04-07)
Steven Cress	Norma Polk-Miles (06-08)
Odetta C. Perdue	Anthony Bowen (96-08)
Raymond Redden	Jeanette Tressler (06-09)
Hinson Finney	Rev. Ronnie White (08-10)
Ira Hancock	Belle Redden (09-11)
Robert Ward	E. Nadine Miller (07-11)
Elsie Bowen	Mary Yenney (06-13)
Faye Thornes	Dr. Nancy Dorman (07-13)
Frederick Fletcher	Susan Canfora (11-13)
Rev. Thomas Wall	Judy Boggs (02-14)
Richard Bundick	Jeff Kelchner (06-15)
Carmen Shrouck	Laura McDermott (11-15)
Maude Love	Emma Klein (08-15)
Reginald T. Hancock	Wes McCabe (13-16)
Elsie Briddell	Nancy Howard (09-16)
Juanita Merrill	Judy Stinebiser (13-16)
Raymond R. Jarvis, III	Arlette Bright (11-17)
Edward O. Thomas	Tracey Cottman (15-17)
Theo Hauck	Ronnie White (18-19)
Marie Doughty	
James Taylor	
K. Bennett Bozman	
Wilson Duncan	
Connie Quillin	
Lela Hopson	
Dorothy Holzworth	
Doris Jarvis	
Eugene Birckett	
Eric Rauch	
Oliver Waters, Sr.	
Floyd F. Bassett, Jr.	
Warner Wilson	
Mance McCall	
Louise Matthews	
Geraldine Thweat (92-98)	
Darryl Hagy (95-98)	
Richard Bunting (96-99)	
John E. Bloxom (98-00)	
Katie Briddell (87-90, 93-00)	
Thomas J. Wall, Sr. (95-01)	
Mike Pennington (98-01)	
Desire Becketts (98-01)	

\* = Appointed to fill an unexpired term

Updated: August 6, 2019  
Printed: January 24, 2020

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## SOLID WASTE ADVISORY COMMITTEE

Reference: County Commissioners' Resolution 5/17/94 and 03-6 on 2/18/03

Appointed by: County Commissioners

Function: Advisory  
Review and comment on Solid Waste Management Plan, Recycling Plan, plans for solid waste disposal sites/facilities, plans for closeout of landfills, and to make recommendations on tipping fees.

Number/Term: 1 1/4-year terms; Terms expire December 31st.

Compensation: \$50 per meeting expense allowance, subject to annual appropriation

Meetings: At least quarterly

Special Provisions: One member nominated by each County Commissioner; and one member appointed by County Commissioners upon nomination from each of the four incorporated towns.

Staff Support: Solid Waste - Solid Waste Superintendent - Mike Mitchell - (410-632-3177)  
Solid Waste - Recycling Coordinator - Mike McClung - (410-632-3177)  
Department of Public Works - John Tustin - (410-632-5623)

### Current Members:

<u>Member's Name</u>	<u>Nominated By</u>	<u>Resides</u>	<u>Years of Term(s)</u>
Michael Pruitt	Town of Snow Hill		*15, 15-19
Bob Augustine	D-3, Church	Berlin	16-20
Granville Jones	D-7, Mitrecic	Berlin	*15-16, 16-20
Michelle Beckett-El Soloh	Town of Pocomoke City		*19-20
Vaughn White	D-2, Purnell	Berlin	*19-21
Jamey Latchum	Town of Berlin		*17, 17-21
Steve Brown	Town of Ocean City		*10-13-17, 17-21
George Linvill	D-1, Nordstrom	Pocomoke	14-18, 18-22
James Rosenberg	D-5, Bertino	Ocean Pines	*06-10-14-18, 18-22
George Dix	D-4, Elder	Snow Hill	*10-10-14-18, 18-22
Mike Poole	D-6, Bunting	Bishopville	11-15-19, 19-23

*Retiring  
replaced by  
Hal Adams*

### Prior Members: (Since 1994)

Ron Cascio (94-96)  
Roger Vacovsky, Jr. (94-96)  
Lila Hackim (95-97)  
Raymond Jackson (94-97)  
William Turner (94-97)  
Vernon "Corey" Davis, Jr. (96-98)  
Robert Mangum (94-98)  
Richard Rau (94-96)  
Jim Doughty (96-99)  
Jack Peacock (94-00)  
Hale Harrison (94-00)

Richard Malone (94-01)  
William McDermott (98-03)  
Fred Joyner (99-03)  
Hugh McFadden (98-05)  
Dale Pruitt (97-05)  
Frederick Stiehl (05-06)  
Eric Mullins (03-07)  
Mayor Tom Cardinale (05-08)  
William Breedlove (02-09)  
Lester D. Shockley (03-10)  
Woody Shockley (01-10)

John C. Dorman (07-10)  
Robert Hawkins (94-11)  
Victor Beard (97-11)  
Mike Gibbons (09-14)  
Hank Westfall (00-14)  
Marion Butler, Sr. (00-14)  
Robert Clarke (11-15)  
Bob Donnelly (11-15)  
Howard Sribnick (10-16)  
Dave Wheaton (14-16)  
Wendell Purnell (97-18)  
George Tasker (\*15-20)

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Prior Members: Cont.

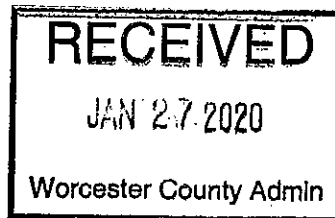
Rodney Bailey \*19





# TOWN OF OCEAN CITY

*The White Marlin Capital of the World*



January 22, 2019

Joseph Mitrecic, President  
Worcester County Commissioners  
1 West Market Street – Room 1103  
Snow Hill, MD 21863

RE: Worcester County Solid Waste Advisory Committee

Dear President Mitrecic,

The Mayor and City Council would like to request an appointment of Hal Adkins, Public Works Director, to the Worcester County Solid Waste Advisory Committee. Steve Brown, Solid Waste Manager, currently serves on the committee but is retiring February 28, 2020.

We thank you in advance for your consideration of our request.

Sincerely,

Richard W. Meehan  
Mayor

cc: Harold Higgins, Chief Administrative Officer for Worcester County, MD  
Commissioner Nordstrom  
Commissioner Church  
Commissioner Bunting  
Commissioner Elder  
Commissioner Purnell  
Commissioner Bertino  
Ocean City Council  
City Manager Miller

**MAYOR**  
RICHARD W. MEEHAN

**CITY COUNCIL**

LLOYD MARTIN  
*President*

MARY P. KNIGHT  
*Secretary*

DENNIS W. DARE  
ANTHONY J. DELUCA  
JOHN F. GEHRIG, JR.  
MATTHEW M. JAMES  
MARK L. PADDACK

**CITY MANAGER**  
DOUGLAS R. MILLER

**CITY CLERK**  
DIANA L. CHAVIS, CMC

[www.oceancitymd.gov](http://www.oceancitymd.gov)

P.O. BOX 158 • OCEAN CITY, MARYLAND • 21843-0158



City Hall – (410) 289-8221 • FAX – (410) 289-8703

2001

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## TOURISM ADVISORY COMMITTEE

Reference: County Commissioners' Resolution of May 4, 1999 and 03-6 of 2/18/03

Appointed by: County Commissioners

Function: Advisory  
Advise the County Commissioners on tourism development needs and recommend programs, policies and activities to meet needs, review tourism promotional materials, judge tourism related contests, review applications for State grant funds, review tourism development projects and proposals, establish annual tourism goals and objectives, prepare annual report of tourism projects and activities and evaluate achievement of tourism goals and objectives.

Number/Term: 7/4-Year term - Terms expire December 31st

Compensation: \$50 per meeting expense allowance

Meetings: At least bi-monthly (6 times per year), more frequently as necessary

Special Provisions: One member nominated by each County Commissioner

Staff Contact: Tourism Department - Lisa Challenger (410-632-3110)

### Current Members:

<u>Member's Name</u>	<u>Nominated By</u>	<u>Resides</u>	<u>Years of Term(s)<sup>2</sup></u>
Isabel Morris	D-6, Bunting	Bishopville	11-15, 15-19
Elena Ake	D-3, Church	West Ocean City	*16, 16-20
Josh Davis	D-5, Bertino	Berlin	*19-21
Lauren Taylor	D-7, Mitrecic	Ocean City	13-17, 17-21
Gregory Purnell	D-2, Purnell	Berlin	14-18, 18-22
Michael Day	D-4, Elder	Snow Hill	*19
Barbara Tull	D-1, Nordstrom	Pocomoke	03-11-15-19, 19-23

### Prior Members: Since 1972

Isaac Patterson <sup>1</sup>	Barry Laws (99-03)	Molly Hilligoss (15-18)
Lenora Robbins <sup>1</sup>	Klein Leister (99-03)	Denise Sawyer (*18-19)
Kathy Fisher <sup>1</sup>	Bill Simmons (99-04)	
Leroy A. Brittingham <sup>1</sup>	Bob Hulburd (99-05)	
George "Buzz" Gering <sup>1</sup>	Frederick Wise (99-05)	
Nancy Pridgeon <sup>1</sup>	Wayne Benson (05-06)	
Marty Batchelor <sup>1</sup>	Jonathan Cook (06-07)	
John Verrill <sup>1</sup>	John Glorioso (04-08)	
Thomas Hood <sup>1</sup>	David Blazer (05-09)	
Ruth Reynolds (90-95)	Ron Pilling (07-11)	
William H. Buchanan (90-95)	Gary Weber (99-03, 03-11)	
Jan Quick (90-95)	Annemarie Dickerson (99-13)	
John Verrill (90-95)	Diana Purnell (99-14)	
Larry Knudsen (95)	Kathy Fisher (11-15)	
Carol Johnsen (99-03)	Linda Glorioso (08-16)	
Jim Nooney (99-03)	Teresa Travatello (09-18)	

\* = Appointed to fill an unexpired term

1 = Served on informal ad hoc committee prior to 1990, Committee abolished between 1995-1999

2 = All members terms reduced by 1-year in 2003 to convert to 4-year terms

**RENEE M. SEIDEN (VITILIO)**

January 10, 2020

Ms. Kim Moses  
Worcester County Government  
1 W. Market Street  
Snow Hill, MD 21863

Dear Ms. Moses,

I would like to be considered to participate on the Tourism Advisory Committee for Worcester County.

As you can see from my resume, I have spent my entire career as a tourism professional in Maryland, with the vast majority of my experience in Worcester County. I have also had previous experience in Baltimore City and the Washington DC Metro Area. I feel that I have the necessary background and skills to have a positive impact on this advisory board. I would like the opportunity to be a productive asset to the County.

If there is any other information or details I can provide that might be important in allowing consideration, please do not hesitate to let me know. Of course, I can provide business and/or personal references if needed.

Looking forward to hearing back from you.

Warm Regards,

*Renee M. Seiden*

Renee M. Seiden (Vitilio)



## RENEE M. SEIDEN (VITILIO)

### EXPERIENCE

#### **REAL HOSPITALITY GROUP** Ocean City, MD

##### **AREA DIRECTOR OF SALES**

December 2019 – Present

Work in conjunction with the property-level Directors of Sales and the Regional Director of Sales for Real Hospitality Group hotels in Ocean City and the Delaware Beaches to facilitate business into all 12 hotels.

#### **THE PINNACLE HOSPITALITY GROUP** Ocean City, MD

5 Hotels

##### **REGIONAL DIRECTOR OF SALES & MARKETING**

April 2019 – December 2019

Oversee sales & marketing for 5 hotels on the Delmarva Peninsula from Chincoteague, Virginia to Rehoboth Beach, Delaware including maintaining personal sales efforts for all properties. Properties included Hilton, Radisson, Choice, and independents.

#### **ROD 'N' REEL RESORT** Chesapeake Beach, MD

70 Rooms

##### **DIRECTOR OF SALES & MARKETING**

January 2018 – April 2019

Responsible for all aspects of sales and marketing for this resort including gaming, bingo, food & beverage, marina, charter fishing, salon & spa, weddings, concert series, meetings & conferences as it begins a \$40M expansion project. Maintain personal sales effort while leading sales team and marketing team. Created and implemented systems that will enable this resort to grow as it adds an additional 60 rooms and doubles the event space. Assisted with rebranding from Chesapeake Beach Resort & Spa to Rod 'N' Reel Resort.

#### **CLARION RESORT FONTAINEBLEAU HOTEL** Ocean City, MD

250 Rooms

##### **SHERATON FONTAINEBLEAU HOTEL**

82 Condominiums

##### **DIRECTOR OF SALES & MARKETING**

November 1999-January 2018

Responsible for all aspects of sales and marketing including overseeing sales, catering, convention services, and golf packaging. Oversee staff of seven people as well as maintain personal direct sales effort. Work in conjunction with the General Manager to implement effective yield management and direct-to-consumer internet sales. Responsible for all regional advertising, trade show participation, oversee social media, brochures and marketing collateral including websites, e-brochures, and internet marketing. Surpass budgeted room nights and revenue annually as a department. Created and implemented campaign for name change from Sheraton to Clarion Resort. Secured annual event for the hotel with the Baltimore Ravens.

#### **SALES MANAGER**

May 1996-November 1999

Was responsible for direct sales in all market segments. Assisted in preparing and implementing annual marketing plan. Was the liaison between golf packaging company and the hotel. Implemented computerization of sales office and acted as Key Operator for Delphi. Assisted with installation of new property management system from sales office perspective and successfully interfaced this system with Delphi. Was responsible for all sales department interaction with Starwood Hotels. Promoted to Director of Sales & Marketing

**BROOKSHIRE HOTELS****CAROUSEL HOTEL & RESORT**

Ocean City, MD

265 Rooms

**DIRECTOR OF SALES & MARKETING**

August 1993-March 1996

Was responsible for all aspects of sales and marketing for this oceanfront resort. Oversaw staff of five people as well as maintained personal direct sales effort. Prepared and implemented annual marketing plan and department budget. Effectively developed and coordinated all activities in the hotel relating to group and transient business including yield management and packaging. Successfully operated within budgetary guidelines. Was responsible for all internal and external marketing, regional advertising, and trade show participation. Implemented automation and computerization of sales department.

**DIRECTOR OF SALES**

October 1990-August 1993

Was responsible for operation of sales department as well as communication with management company and hotel owner through reports and monthly meetings. Hotel of the Year in Sales & Marketing for Brookshire Hotels in 1990. Was promoted to Director of Sales & Marketing.

**SALES MANAGER**

May 1989-October 1990

Was responsible for direct sales in government, military, and education and related association markets. Increased market segment room nights by 2.5% and average rate by \$4.00. Was promoted to Director of Sales.

**COMMUNITY & ORGANIZATIONS – Past & Present**

Maryland Tourism Coalition Board of Directors

Greater Ocean City Golf Association – Board of Directors &amp; Marketing Committee

Choice Hotels Regional Marketing Committee

Ocean City Hospitality Sales &amp; Marketing Partnership – Past President

Ocean City Convention &amp; Visitors Bureau

Economic Development Committee

Ocean City Hotel-Motel-Restaurant Association

Greater Ocean City Chamber of Commerce

Training Officers Consortium

Society of Government Meeting Professionals

Religious Conference Management Association

Calvert County Chamber of Commerce Board Member

Seaside Dance Parents Association – Secretary

**EDUCATION**

Newmarket Software Systems, Inc.

Delphi Sales &amp; Catering Computer System Training

Key Operator Training

Marketing Vision Training

Crystal Reports

National Guest Systems Corporation

Miracle Sales &amp; Catering Computer System Supervisor Training

University of Maryland College Park

REFERENCES AVAILABLE UPON REQUEST

**WATER AND SEWER ADVISORY COUNCIL  
MYSTIC HARBOUR SERVICE AREA**

Reference: County Commissioners' Resolutions of 11/19/93 and 2/1/05

Appointed by: County Commissioners

Function: Advisory  
Advise Commissioners on water and sewer needs of the Service Area;  
review amendments to Water and Sewer Plan; make recommendations on  
policies and procedures; review and recommend charges and fees; review  
annual budget for the service area.

Number/Term: 7/4-year terms  
Terms Expire December 31

Compensation: Expense allowance for meeting attendance as authorized in the budget.

Meetings: Monthly or As-Needed

Special Provisions: Must be residents of Mystic Harbour Service Area

Staff Support: Department of Public Works - Water and Wastewater Division  
John Ross - (410-641-5251)

**Current Members:**

<u>Member's Name</u>	<u>Resides</u>	<u>Years of Term(s)</u>
Joseph Weitzell <sup>c</sup>	Mystic Harbour	05-11-15, 15-19
Bob Hunt	Deer Point	*06-11-15, 15-19
David Dypsky	Teal Marsh Center	*10-12-16, 16-20
Stan Cygam	Whispering Woods	*18-20
Martin Kwesko	Mystic Harbour	13-17, 17-21
Richard Jendrek <sup>c</sup>	Bay Vista I	05-10-14-18, 18-22
Matthew Kraeuter	Ocean Reef	19-22

**Prior Members: (Since 2005)**

John Pinnero <sup>c</sup> (05-06)	Carol Ann Beres (14-18)
Brandon Phillips <sup>c</sup> (05-06)	
William Bradshaw <sup>c</sup> (05-08)	
Buddy Jones (06-08)	
Lee Trice <sup>c</sup> (05-10)	
W. Charles Friesen <sup>c</sup> (05-13)	
Alma Seidel (08-14)	
Gerri Moler (08-16)	
Mary Martinez (16-18)	



**WATER AND SEWER ADVISORY COUNCIL  
WEST OCEAN CITY SERVICE AREA**

Reference: County Commissioners' Resolution of November 19, 1993

Appointed by: County Commissioners

Function: Advisory  
Advise Commissioners on water and sewer needs of the Service Area; review amendments to Water and Sewer Plan; make recommendations on policies and procedures; review and recommend charges and fees; review annual budget for the service area.

Number/Term: 5/4-year terms  
Terms Expire December 31

Compensation: Expense allowance for meeting attendance as authorized in the budget

Meetings: Monthly

Special Provisions: Must be residents/ratepayers of West Ocean City Service Area

Staff Support: Department of Public Works - Water and Wastewater Division  
John Ross - (410-641-5251)

**Current Members:**

<u>Member's Name</u>	<u>Resides/Ratepayer of</u>	<u>Terms (Years)</u>
Deborah Maphis	West Ocean City	95-99-03-07-11-15, 15-19
Gail Fowler	West Ocean City	99-03-07-11-15, 15-19
Blake Haley	West Ocean City	*19-20
Todd Ferrante	West Ocean City	13-17, 17-21
Keith Swanton	West Ocean City	13-17, 17-21

**Prior Members: (Since 1993)**

Eleanor Kelly<sup>c</sup> (93-96)                      Andrew Delcorro (\*14-19)

John Mick<sup>c</sup> (93-95)

Frank Gunion<sup>c</sup> (93-96)

Carolyn Cummins (95-99)

Roger Horth (96-04)

Whaley Brittingham<sup>c</sup> (93-13)

Ralph Giove<sup>c</sup> (93-14)

Chris Smack (04-14)

# COMMISSION FOR WOMEN

Reference: Public Local Law CG 6-101

Appointed by: County Commissioners

Function: Advisory

Number/Term: 11/3-year terms; Terms Expire December 31

Compensation: None

Meetings: At least monthly (3<sup>rd</sup> Tuesday at 5:30 PM - alternating between Berlin and Snow Hill)

Special Provisions: 7 district members, one from each Commissioner District  
4 At-large members, nominations from women's organizations & citizens  
4 Ex-Officio members, one each from the following departments: Social Services, Health & Mental Hygiene, Board of Education, Public Safety  
No member shall serve more than six consecutive years

Contact: Liz Mumford and Tamara White, Co-Chair  
Worcester County Commission for Women - P.O. Box 1712, Berlin, MD 21811

## Current Members:

<u>Member's Name</u>	<u>Nominated By</u>	<u>Resides</u>	<u>Years of Term(s)</u>
Tamara White	D-1, Lockfaw	Pocomoke City	17-20
Vanessa Alban	D-5, Bertino	Ocean Pines	17-20
Terri Shockley	At-Large	Snow Hill	17-20
Laura Morrison	At-Large	Pocomoke	*19-20
Kelly O'Keane	Health Department		17-20
Kelly Riwniak	Public Safety - Sheriff's Office		*19-20
Darlene Bowen	D-2, Purnell	Pocomoke	*19-21
Elizabeth Rodier	D-3, Church	West Ocean City	18-21
Bess Cropper	D-6, Bunting	Berlin	15-18, 18-21
Kimberly List	D-7, Mitrecic	Ocean City	18-21
Gwendolyn Lehman	At-Large	Berlin	*19-21
Mary E. (Liz) Mumford	At-Large	Ocean City	*16, 16-19, 19-22
Coleen Colson	Dept of Social Services		19-22
Hope Carmean	D-4, Elder	Snow Hill	*15-16-19, 19-22
Windy Phillips	Board of Education		19-22

## Prior Members: Since 1995

Ellen Pilchard <sup>c</sup> (95-97)	Carole P. Voss (98-00)	Gloria Bassich (98-03)
Helen Henson <sup>c</sup> (95-97)	Martha Bennett (97-00)	Carolyn Porter (01-04)
Barbara Beaubien <sup>c</sup> (95-97)	Patricia Ilczuk-Lavanceau (98-99)	Martha Pusey (97-03)
Sandy Wilkinson <sup>c</sup> (95-97)	Lil Wilkinson (00-01)	Teole Brittingham (97-04)
Helen Fisher <sup>c</sup> (95-98)	Diana Purnell <sup>c</sup> (95-01)	Catherine W. Stevens (02-04)
Bernard Bond <sup>c</sup> (95-98)	Colleen McGuire (99-01)	Hattie Beckwith (00-04)
Jo Campbell <sup>c</sup> (95-98)	Wendy Boggs McGill (00-02)	Mary Ann Bennett (98-04)
Karen Holck <sup>c</sup> (95-98)	Lynne Boyd (98-01)	Rita Vaeth (03-04)
Judy Boggs <sup>c</sup> (95-98)	Barbara Trader <sup>c</sup> (95-02)	Sharyn O'Hare (97-04)
Mary Elizabeth Fears <sup>c</sup> (95-98)	Heather Cook (01-02)	Patricia Layman (04-05)
Pamela McCabe <sup>c</sup> (95-98)	Vyoletus Ayres (98-03)	Mary M. Walker (03-05)
Teresa Hammerbacher <sup>c</sup> (95-98)	Terri Taylor (01-03)	Norma Polk Miles (03-05)
Bonnie Platter (98-00)	Christine Selzer (03)	Roseann Bridgman (03-06)
Marie Velong <sup>c</sup> (95-99)	Linda C. Busick (00-03)	Sharon Landis (03-06)

\* = Appointed to fill an unexpired term  
c = Charter member

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Prior Members: Since 1995 (continued)

Dr. Mary Dale Craig (02-06)	Michelle Bankert *(14-18)
Dee Shorts (04-07)	Nancy Fortney (12-18)
Ellen Payne (01-07)	Cristi Graham (17-18)
Mary Beth Quillen (05-08)	Alice Jean Ennis (14-17)
Marge SeBour (06-08)	Lauren Mathias Williams *(16-18)
Meg Gerety (04-07)	Teola Brittingham *(16-18)
Linda Dearing (02-08)	Jeannine Jerscheid *(18-19)
Angela Hayes (08)	Shannon Chapman (*17-19)
Susan Schwarten (04-08)	Julie Phillips (13-19)
Marilyn James (06-08)	
Merilee Horvat (06-09)	
Jody Falter (06-09)	
Kathy Muncy (08-09)	
Germaine Smith Garner (03-09)	
Nancy Howard (09-10)	
Barbara Witherow (07-10)	
Doris Moxley (04-10)	
Evelyne Tyndall (07-10)	
Sharone Grant (03-10)	
Lorraine Fasciocco (07-10)	
Kay Cardinale (08-10)	
Rita Lawson (05-11)	
Cindi McQuay (10-11)	
Linda Skidmore (05-11)	
Kutresa Lankford-Purnell (10-11)	
Monna Van Ess (08-11)	
Barbara Passwater (09-12)	
Cassandra Rox (11-12)	
Diane McGraw (08-12)	
Dawn Jones (09-12)	
Cheryl K. Jacobs (11)	
Doris Moxley (10-13)	
Kutresa Lankford-Purnell (10-12)	
Terry Edwards (10-13)	
Dr. Donna Main (10-13)	
Beverly Thomas (10-13)	
Caroline Bloxom (14)	
Tracy Tilghman (11-14)	
Joan Gentile (12-14)	
Carolyn Dorman (13-16)	
Arlene Page (12-15)	
Shirley Dale (12-16)	
Dawn Cordrey Hodge (13-16)	
Carol Rose (14-16)	
Mary Beth Quillen (13-16)	
Debbie Farlow (13-17)	
Corporal Lisa Maurer (13-17)	
Laura McDermott (11-16)	
Charlotte Cathell (09-17)	
Eloise Henry-Gordy (08-17)	

# *Worcester County's Initiative to Preserve Families*

6040 Public Landing Rd.  
Post Office Box 129  
Snow Hill, MD 21863

Telephone: 410-632-3648



Worcester County's  
Initiative  
to Preserve Families

January 22, 2020

**TO:** Harold Higgins, Chief Administrative Officer  
**THROUGH:** Jennifer LaMade, Director of Planning, Quality, and Core Service (JL)  
Rebecca Jones, Health Officer (RJ)  
**FROM:** Jessica Sexauer, Director (JS)  
Local Management Board  
**SUBJECT:** 2020 Community Partnership Agreement

Please accept this document as a request to approve the Fiscal Year 2020 Local Management Board Community Partnership Agreement. The total award amount for Worcester County is \$701,485. The programs to be funded in fiscal year 2020 are:

- Building Bridges to Stable Families
- Worcester Education, Employment and Empowerment (WE3)
- Worcester Connects, A Mentoring Program
- Local Care Team Coordinator

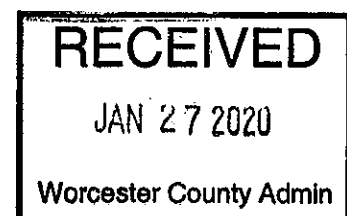
In addition to these four programs, the Local Management Board will be utilizing training funds allocated in the Board Support budget to provide evidence based trainings to Worcester County including: Trauma Informed Care; Adverse Childhood Experience; as well as Strength-Based and Resiliency.

The results and indicators have been reviewed by LMB staff, LMB Board members, and staff from the Governor's Office for Children. This Community Partnership Agreement encompasses services provided during fiscal year 2020. We are requesting that the three copies of the Community Partnership Agreement be reviewed and signed. Please return all three signed copies to the LMB. An original copy will be provided to the County Commissioners after approval by the Governor's Office for Children. If you have any questions, please contact me at 410-632-1100 extension 1025.

Thank you for your time and consideration.

cc: Kelly Shannahan, Assistant Chief Administrative Officer

Enclosure (3)



*Worcester County's Local Management Board*

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## GOVERNOR'S COORDINATING OFFICES

COMMUNITY INITIATIVES • SERVICE & VOLUNTEERISM • MINORITY AFFAIRS  
CRIME CONTROL & PREVENTION • CHILDREN • DEAF & HARD OF HEARING  
PERFORMANCE IMPROVEMENT • GRANTS

To: Local  
Chair and Point(s) of

Management Board  
Contact

From: Kim Malat, Assistant Deputy Director

Re: FY 2020 Community Partnership Agreement Contract

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The FY 2020 Community Partnership Agreement, which includes the Appendix A and Appendix B approved by the Governor's Office for Children (Office), is ready for execution.

There are three (3) additional documents attached to the email that included this memo, as follows:

1. The contract boilerplate – this is main part of the Agreement and was prepared using the FY19 version of the document and is individualized to the Local Management Board;
2. The Appendix A Program Description Chart; and,
3. The Appendix B and cover pages for the Appendix A and Appendix B.

The approved performance measures for each program/strategy have been incorporated in the Program Description chart that is the Appendix A.

Please print at least two (2) original copies of all the materials (one copy for the Office and one for the Board) that were included as attachments to this email. Please DO NOT use a version other than what was sent to you in this email. Double-sided printing is acceptable. If the Local Management Board requires more than one copy locally – print as many as is necessary. If more space is needed for additional local signatures on the contract boilerplate, please add a space for the signatures on the last page or add a new page.

Authorized Local Management Board officials should sign all original copies (2 cover pages and the boilerplate) where indicated on the contract boilerplate and the Appendix A and Appendix B cover sheets. Each signatory should sign where indicated and provide the date of the signature.

If local sign-off for legal sufficiency is not required, please forward with the signed Agreements a brief memo or email that confirms this decision.

Once all the local signatures have been obtained, mail all the originals to the Office, addressed to the attention of Kim Malat, Assistant Deputy Director. **A cover letter is not necessary.** I will ensure that the necessary State signatures are obtained and will then forward the fully-executed documents to the Local Management Board for it files.

Please note that the State cannot separately execute the individual parts of the Community Partnership Agreement contract, but must execute the contract in its entirety and at the same time. Deviation from the above instructions will cause a delay in execution of the contract, which will cause a delay in the release of the first payment to the Local Management Board.

Please do not hesitate to contact me at 410.697-9245 or [kim.malat@maryland.gov](mailto:kim.malat@maryland.gov) if you have questions. Thank you for your prompt attention to this matter.

**COMMUNITY PARTNERSHIP AGREEMENT**  
**BETWEEN**  
**STATE OF MARYLAND**  
**AND**  
**COUNTY COMMISSIONERS OF WORCESTER COUNTY, MARYLAND**

This Community Partnership Agreement ("**Agreement**") effective, as of July 1, 2019, between the State of Maryland ("**State**"), acting by and through the Children's Cabinet ("**Cabinet**"); and the **County Commissioners of Worcester County, Maryland** ("**Subdivision**"), acting by and through the Local Management Board ("**Board**"), the County's Initiative to Preserve Families, designated as the local management board by the Subdivision pursuant to Section 8-301 of the Human Services Article of the Annotated Code of Maryland.

**WHEREAS**, the **Cabinet** and the **Board** intend to enter into a partnership to develop a more comprehensive integration of children and family services and the funding for these services; and

**WHEREAS**, pursuant to Title 8, Subtitle 5 of the Human Services Article of the Annotated Code of Maryland, the **Board** has made an application for money from the **Cabinet** Fund, and desires to enter into a Community Partnership Agreement that: (1) reflects coordination with the State's three-year plan for children, youth, and families and any local government plan for services for children, youth, and families; and (2) addresses the priorities and strategies of the Subdivision for meeting the identified needs of children and families as articulated in the **Board's** community plan; and,

**WHEREAS**, the **Cabinet** intends to disburse **Cabinet** funds to the **Board** subject to certain terms, conditions, performance measures, or outcome evaluations that the **Cabinet** considers necessary,

**NOW THEREFORE**, for good and valuable consideration, the sufficiency of which is acknowledged by both parties, the parties hereto agree as follows:

**I.     SCOPE**

The purpose of this **Agreement** is to establish a Community Partnership Agreement in **Worcester County, Maryland** to establish a comprehensive, integrated children and family interagency service delivery system that is community-based, family-focused and culturally competent. This **Agreement** is based on a shared vision and a joint commitment by the **Cabinet** and the **Board** to advance a results-based accountability and management system that enhances child and family well-being.

This **Agreement** includes Appendices A and B, which are attached hereto and incorporated herein. The appendices that are attached and incorporated into this **Agreement** are as follows:

1. Appendix A, Program Description Chart, which sets forth the details

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of the programs/strategies to be funded in whole or in part by the **Cabinet** and managed by the **Board** under this **Agreement**, for the fiscal year; and,

2. Appendix B, which contains the annual budget for **Cabinet-funded** programs/strategies and Board Support.

## II. PROGRAMS AND SERVICES TO BE PROVIDED

- A. The programs, services, requirements, conditions and other activities of the **Board** as to its operations that will be funded by the **Cabinet** are set forth in the Appendices A and B. By accepting **Cabinet** funds under this **Agreement**, the **Board** agrees to the terms and conditions set forth herein and appended hereto and those contained in the State of Maryland Policies and Procedures Manual for Local Management Boards ("Manual"), which is incorporated by reference into this **Agreement** in accordance with paragraph VIII (H) herein.
- B. The **Board** shall comply with applicable provisions of Title 8 of the Human Services Article of the Annotated Code of Maryland; the Code of Maryland Regulations ("COMAR"); written guidelines and policies communicated in writing and issued by the **Cabinet** and the Executive Director for the **Governor's Office for Children**; and other applicable federal and State laws, regulations, and policies relating to the terms and conditions of this **Agreement**, including the delivery of services to children and families described herein.
- C. The parties hereby expressly acknowledge the possibility of substantial changes in State and federal regulations applicable to this **Agreement** and expressly agree to negotiate associated amendments to the **Agreement** as necessary to comply with such changes; *provided* that any increase in the scope of work or cost of performance associated with such amendments may be compensated by a budget increase or, in the alternative, by modifying the scope of work to reduce the cost of performance, as determined by the **Cabinet** in its sole discretion. Any such modification in the scope of work or budget shall be performed in accordance with the provisions of this **Agreement** (see Section V "MODIFICATIONS").

## III. TERM

This **Agreement** shall be effective and remain in full force and effect for State fiscal year 2020 (July 1, 2019 – June 30, 2020) unless modified or terminated under Sections V. ("MODIFICATIONS") and VI. ("TERMINATION") herein, and unless renewed thereafter upon the mutual written agreement of the parties.

## IV. FUNDING

- A. Amount: Funding for the programs/strategies to be provided by the **Board** under this **Agreement** will be provided by the **Cabinet**. The total amount will be determined by the **Governor's Office for Children** on



behalf of the **Cabinet**, based on the proposed budget submitted by the **Board** and approved by the **Governor's Office for Children** on behalf of the **Cabinet**, and which is subject to annual **State** appropriations.

B. Conditions:

1. Funding received from the **Cabinet** is conditioned upon the availability of **State** appropriations. The **Board** shall make every effort to maximize revenue from sources other than **State** appropriations. In the event of a funding reduction, the **Subdivision** shall not be required to utilize **Subdivision** funds to meet the objectives of this **Agreement**.
2. Funding received from the **Cabinet** is conditioned upon the **Board** complying with the conditions as set forth in this **Agreement**, including Appendices A and B.
3. Funding received from the **Cabinet** is conditioned on the submission by the **Board** of an annual budget that has been approved by the **Cabinet**.
4. Funding received from the **Cabinet** is conditioned on the submission by the **Board** of performance measures for each funded program/strategy noted in Appendix A in accordance with the instructions established by the **Cabinet**.
5. Funding received from the **Cabinet** is conditioned on the utilization by the **Board** of the Results Scorecard web-based application for each funded program/strategy noted in Appendix A in accordance with the instructions established by the **Governor's Office for Children**.

C. Payments: Payments from the **Cabinet** Fund pursuant to this **Agreement** shall be made in accordance with the provisions of the Manual.

D. Withholding and Repayment of Funds:

1. The **Cabinet** reserves the right to withhold the transfer of **Cabinet** funds to the **Board** if the **Board** fails to:
  - a) Comply with the terms and conditions of this **Agreement**, including any and all **Children's Cabinet** reporting requirements; and/or,
  - b) Implement the programs/strategies listed in Appendix A in accordance with the terms and conditions of this **Agreement**.
2. Before any funds are withheld hereunder, the **Cabinet** shall notify the **Board** in writing of the provision(s) of the **Agreement** that the **Board** failed to follow. The **Board** shall have thirty (30) calendar days from receipt of the **Cabinet** notice to develop a corrective plan acceptable to the **Cabinet**. This corrective plan shall specify the date by which

deficiencies will be corrected. Failure by the **Board** to correct deficiencies shall result in withholding of funds hereunder by the **Cabinet**.

3. Any funds not expended during the fiscal year shall be returned to the Children's Cabinet Fund in accordance with Manual requirements or as directed by the Children's Cabinet.

**V. MODIFICATIONS**

No amendment or modification to this **Agreement** is binding unless it is in writing and signed by all parties, except as specifically provided in the Manual.

**VI. TERMINATION**

- A. This **Agreement** may be terminated by the **Cabinet**, upon sixty (60) calendar days written notice, if the **Board** fails to fulfill its obligations under the **Agreement** as determined by the **Cabinet** in its sole discretion, or if termination is determined by the **Cabinet** in its sole discretion to be in the best interest of the **Cabinet**. The **Subdivision** or the **Board** may terminate the **Agreement**, upon sixty (60) calendar days written notice, if that is determined to be in the best interest of the **Subdivision** or the **Board**. The **Cabinet** shall pay the cost of budgeted expenditures made prior to the date of termination that are consistent with the terms of this **Agreement** and the **Board** Manual.
- B. If the **Cabinet** determines that the **Agreement**, or any portion thereof, must be terminated due to a lack of appropriations or other reductions to the **Cabinet** Fund, the provisions of the above paragraph A. do not apply. In such circumstances, the **Cabinet** will attempt to provide prior notice of termination and payment for allowable budgeted expenditures prior to the date of termination, to the extent feasible.
- C. Termination of this **Agreement** does not relieve the **Subdivision** of the requirements of Section 8-301 of the Human Services Article of the Annotated Code of Maryland requiring the establishment of a Local Management Board. Prior to termination of this **Agreement**, the **Subdivision** and the **Board** shall adopt and implement a transition plan, subject to approval by the **Cabinet**, to ensure the continuation of programs and services under this **Agreement** through a State or local entity. However, if the **Cabinet** terminates this **Agreement** due to a lack of appropriations or other reductions to the **Cabinet** Fund, then the **Subdivision** and the **Board** may be relieved of all obligations to continue the programs and services required under this **Agreement** if substitute funding cannot be obtained. Termination under this Paragraph C shall occur in accordance with the provisions of the Manual.

**VII. REVIEW PROCESS**

The **Board** may request a review of any decision made by or on behalf of the **Cabinet** with respect to this **Agreement**. The request must be made in writing to the Deputy Director of the Governor's Office for Children within thirty (30) calendar days of the decision. The Deputy Director for the Governor's Office for Children will respond, in writing, within sixty (60) calendar days of the date of the **Board** request. A request for review of the Deputy Director's response may be made, in writing, to the **Cabinet** or its designee within thirty (30) calendar days of the date of the Deputy Director's response.

**VIII. GENERAL PROVISIONS AND CONDITIONS**

- A. State Laws and Regulations: The terms of this **Agreement** and its execution, interpretation, and enforcement shall be governed by and are subject to all applicable Maryland laws and regulations and approval of other agencies of the **State**, as required under said laws and regulations.
- B. Successors and Assigns: This **Agreement** shall bind the respective agents, successors and assigns of the parties.
- C. Nondiscrimination: The **Board** shall comply with applicable nondiscrimination provisions of federal and Maryland laws and regulations.
- D. Anti-Bribery: The **Board** certifies that, to the best of its knowledge, neither the **Board** nor any of its officers, directors, partners, nor any of its employees directly involved in obtaining this **Agreement** with the **State** or any county, city, or other subdivision of the State, has been convicted of bribery, attempted bribery, or conspiracy to bribe under the laws of any state or the United States.
- E. It is understood and agreed that the parties to this **Agreement** do not waive any rights they may have to assert governmental or sovereign immunity.
- F. The **State** shall not assume any obligation to indemnify, hold harmless, or pay attorneys' fees that may arise from or in any way be associated with the performance or operation of this **Agreement**.
- G. In the event that monies designated by the United States Department of Health and Human Services for programs under Title IV-A, IV-B, and IV-E of the Social Security Act, as amended, are used in programs provided for under this **Agreement**, the Maryland Department of Human Services, as the Single State Agency for Title IV-A, IV-B, and IV-E funding, retains all decision-making authority which it held as of the date of this **Agreement** for purposes of implementation of any such program. Similarly, if any services provided under this Agreement are funded by Medicaid, under Title XX of the Social Security Act, then the Maryland Department of Health, as the Single State Agency for administration of the Medicaid Program, retains decision-making authority with respect to those funds, to the extent required by 42 U.S.C., Section 1902(a)(5) and 42 CFR 431.10, as amended.

- H. Incorporation by Reference: The provisions of the Manual effective as of July 1, 2019 and amended from time to time, are incorporated herein by reference. The **Board** shall incorporate the Manual by reference into any and all of its subcontracts funded by the **Cabinet** pursuant to this **Agreement**, as appropriate.

IN WITNESS WHEREOF, the **State** and **Subdivision** have executed this **Agreement**.

**THE STATE OF MARYLAND**

BY: \_\_\_\_\_

Deputy Director for the Governor's Office for Children,  
and Chair of the Children's Cabinet

DATE: \_\_\_\_\_, 2020

**LOCAL MANAGEMENT BOARD**

BY: \_\_\_\_\_, Chair

Local Management Board of **Worcester County**

DATE: \_\_\_\_\_, 2020

**SUBDIVISION**

BY: \_\_\_\_\_, (Local official)

**County Commissioners of Worcester County, Maryland**

DATE: \_\_\_\_\_, 2020

Approved as to Form and Legal Sufficiency

This \_\_\_\_\_ day of \_\_\_\_\_, 2020

By: \_\_\_\_\_

**Worcester County Legal Counsel**



Prioritized Result(s)	Prioritized Indicator(s)	Program/Strategy Name	Program/Strategy Description	Target Population	Performance Measures	FY20 Funding	Children's Cabinet Priority
		Board Support	Local state and community representatives that provide ongoing dialogue and feedback to help fill gaps in services in Worcester County for children, youth and families.	Children and Families in Worcester County	<p><b>How much:</b></p> <ul style="list-style-type: none"> <li># of initiatives for which Board convenes the initial interagency or community group</li> <li># of initiatives in which the Board is an active participant</li> </ul> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>#/% of the Board's total revenue that is obtained from non-Children's Cabinet awarded sources (county funds, foundations, federal grants, etc.) to fund administrative costs and/or programs/strategies</li> <li>#/% of all Board staff that have completed no less than introductory training (ex., Results Accountability 101) in Results Accountability (RA) as provided by a trained RA trainer</li> </ul> <p><b>Better off:</b></p> <ul style="list-style-type: none"> <li>#/% of new and ongoing programs/strategies that meet or exceed performance measure targets (no less than 80% of all performance measures per program/strategy are met or exceeded) that are heading in the right direction or turning the curve</li> </ul>	\$224,115	
		Local Care Team Coordinator	The Local Care Team is a multidisciplinary team of local state and community agencies that convene with families and care givers to offer resources, services and recommendations to meet needs.	Children and Families in Worcester County	<p><b>What/How Much We Do:</b></p> <ul style="list-style-type: none"> <li># of new cases referred to the Local Care Team</li> <li># of cases reviewed by the Local Care Team</li> <li># of Local Care Team trainings provided</li> <li># of Local Care Team meetings</li> </ul> <p><b>How Well We Do It:</b></p> <ul style="list-style-type: none"> <li>#/% of mandated Local Care Team representatives that attend at least 75% of Local Care Team meetings.</li> <li>#/% of all Local Care Team reviews (new, follow-up, and annual reviews) where the youth's parents (or legal guardians) attended.</li> </ul>	\$52,884	Preventing out-of-state placements; Trauma-Informed Care and reducing Adverse Childhood Experiences;

Prioritized Result(s)	Prioritized Indicator(s)	Program/Strategy Name	Program/Strategy Description	Target Population	Performance Measures	FY20 Funding	Children's Cabinet Priority
					<p><b>Is Anyone Better Off?</b></p> <ul style="list-style-type: none"> <li>• #/% of new youth referred for in-State residential placement who are alternatively served through community-based services.</li> <li>• #/% of new youth referred for out-of-State placement who are alternatively served through in-state community-based services or in-State residential placements.</li> </ul>		
Youth Have Opportunities for Employment or Career Readiness; Youth will complete School	Disconnected Youth; Youth Employment; High School Dropout Rate; Educational Attainment; High School Completion	Worcester Employment, Education and Empowerment (WE3)	WE3 is designed to provide support services to the Disconnected Youth population. These support services include: job readiness training, resumes building, soft skills training, career assistance, and connections to secondary education and/or vocational training. The program is designed to help youth successfully transition into adulthood by providing the necessary resources to do so.	Disconnected Youth, ages 16-24 who are neither working or in school. Local community partners and agencies will refer youth to the WE3 program.	<p><b>How Much:</b></p> <ul style="list-style-type: none"> <li>• # of youth served</li> <li>• # of community partners committed to supporting the WE3 program and WE3 program participants (partners utilizing and making referrals to WE3 staff)</li> </ul> <p><b>How Well:</b></p> <ul style="list-style-type: none"> <li>• #/% WE3 participants that report service satisfaction every 6 months via Satisfaction Survey while enrolled in services</li> <li>• #/% of WE3 participants that have completed the employment training program</li> </ul> <p><b>Better Off:</b></p> <ul style="list-style-type: none"> <li>• #/% of WE3 participants that retain employment or attended an educational program for at least 90 days</li> <li>• #/% of WE3 participants that have increased their score on the General Self Efficacy (GSE) Scale 6 months after program enrollment</li> </ul>	\$150,000	Improving outcomes for disconnected youth

Prioritized Result(s)	Prioritized Indicator(s)	Program/Strategy Name	Program/Strategy Description	Target Population	Performance Measures	FY20 Funding	Children's Cabinet Priority
Communities are Safe for Children, Youth and Families; Families are Safe and Economically Stable	Out-of-home placements; Crime; Child poverty; youth homelessness	Building Bridges to Stable Families	This program will provide comprehensive support services to children, families, and parents impacted by incarceration. The program will link parents that are incarcerated to resources, including mental health and substance abuse treatment, case management, housing and other local resources that will help maintain stability, and prevent recidivism once released. Parenting classes will be offered to individuals that are incarcerated as well as parents/caregivers in the community. The program will support the children and families of individuals incarcerated by providing case management services that will link families to services and children to programs that promote resilience and sustainability.	Individuals incarcerated in the local detention center, their children and the caregivers of the children; children of incarcerated parents.	<p><b>How Much:</b></p> <ul style="list-style-type: none"> <li># of incarcerated individuals that are enrolled in the program</li> <li># of parents/caregivers not incarcerated enrolled in the program</li> <li># of total parenting classes held in the jail and the community</li> <li># of children enrolled in the program</li> </ul> <p><b>How Well:</b></p> <ul style="list-style-type: none"> <li>% of Transitional Care Plans completed within the first 3 visits to parents (incarcerated and not)</li> <li>% of previously incarcerated parents reporting satisfaction in services offered during their time in detention by the completion of a satisfaction survey within 6 weeks post release</li> <li>% of parents enrolled in a parenting class cohort that complete that cohort</li> </ul> <p><b>Better Off:</b></p> <ul style="list-style-type: none"> <li>% of incarcerated parents that have improved communication with their children/children's caregivers after completion of parenting class via pre/post test</li> <li>% of parents (incarcerated and non) meeting one or more of their three (3) objectives from their transitional care plan within 6 months of enrollment into the Building Bridges program</li> </ul>	\$124,486	Reducing the impact of incarceration on children, youth and families.
Children are Successful in School; Youth will Complete School	Truancy; Bullying/Harassment; High School Dropout Rate; High School Completion/Educational Attainment	Worcester Connects	This program will provide youth, grades 6-12, with a supportive and positive mentor/role model. The mentor service is designed to be a hybrid of 1:1 mentoring services as well as group mentoring to allow mentees to engender a sense of membership with	Youth between the grades of 6-12 that are truant, at risk for truancy, those that are in low poverty income areas (Pocomoke, Berlin, Snow Hill) and	<p><b>How Much:</b></p> <ul style="list-style-type: none"> <li># of youth mentored</li> <li># of 1:1 monthly meetings held between youth and mentor</li> <li># of monthly group meetings held between mentees and mentor</li> </ul> <p><b>How Well:</b></p>	\$150,000	Trauma-informed care and Reducing Adverse Childhood Experiences; Juvenile

Prioritized Result(s)	Prioritized Indicator(s)	Program/Strategy Name	Program/Strategy Description	Target Population	Performance Measures	FY20 Funding	Children's Cabinet Priority
			their peers. This program will be based upon the Check and Connect mentoring program which promotes increased self-esteem, confidence and improve overall health and wellness.	youth who are being bullied/harassed.	<ul style="list-style-type: none"> <li>• #/% of successful contacts (face to face meeting, text messages, and/or phone calls) made to youth during the first 30 days of enrollment</li> <li>• #/% of youth that have improved attendance by 10% in school after being enrolled in the program for 3 months</li> </ul> <p><b>Better Off:</b></p> <ul style="list-style-type: none"> <li>• #/% of youth that have improved School Functioning after 3 months enrolled in the program via pre/post BERs Scale</li> <li>• #/% of youth that have improved their Intrapersonal Strength after 3 months enrolled in the program via pre/post BERs Scale</li> </ul>		justice diversion; Reducing youth homelessness; Reducing childhood hunger; Improving outcomes for disconnected youth;

## APPENDIX A - Fiscal Year 2020

A. GENERAL INFORMATION									
<b>Local Management Board:</b> Worcester County Initiative to Preserve Families									
<b>Street Address:</b> 6040 Public Landing Rd, P.O. Box 249									
<b>City:</b> Snow Hill, MD		<b>Zip:</b>							
<b>Point of Contact:</b> Jessica Sexauer		<b>Phone:</b> 410 632-3648	<b>Fax:</b> 410 632-2869						
<b>Federal Taxpayer ID:</b> 01-0916667									
B. TYPE OF AWARD									
New	<input checked="checked" type="checkbox"/>	Modification	<input type="checkbox"/>						
		Supplemental	<input type="checkbox"/>						
		Reduction	<input type="checkbox"/>						
C. AFFIRMATION									
<p>The Local Management Board agrees to the terms and conditions set forth in Section D of this Appendix, for those Items containing an X in the box appearing prior to the term/condition. The Local Management Board affirms that the information conveyed in this Appendix is true and accurate to the best of its knowledge.</p> <table style="width: 100%; margin-top: 20px;"><tr><td style="width: 50%; border-bottom: 1px solid black; padding-bottom: 5px;">Local Management Board Chair</td><td style="width: 50%; border-bottom: 1px solid black; padding-bottom: 5px;">Date</td></tr><tr><td style="border-bottom: 1px solid black; padding-bottom: 5px;">Local Management Board Point of Contact</td><td style="border-bottom: 1px solid black; padding-bottom: 5px;">Date</td></tr><tr><td style="border-bottom: 1px solid black; padding-bottom: 5px;">State Official</td><td style="border-bottom: 1px solid black; padding-bottom: 5px;">Date</td></tr></table>				Local Management Board Chair	Date	Local Management Board Point of Contact	Date	State Official	Date
Local Management Board Chair	Date								
Local Management Board Point of Contact	Date								
State Official	Date								
<b>Governor's Office for Children use only)</b> <div style="margin-top: 10px;"><input type="checkbox"/> <input checked="checked" type="checkbox"/> Attached Pages <u>4</u> (Enter Number of Pages)</div>									

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[illegible]

## A. GENERAL INFORMATION

**Local Management Board:** Worcester County Initiative to Preserve Families

Street Address: 6040 Public Landing Rd, P.O. Box 249

City: Snow Hill, Md State: Maryland Zip: #

Point of Contact: Jessica Sexauer	Phone: 410 632-3648	Fax:
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Federal Taxpayer ID: 01-0916667

B. TYPE OF AWARD	
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163. AWARD DAY	

New ☒ Modification ☐ Supplemental ☐ Reduction ☐

**DREN'S CABINET AWARD**

STATE FUNDS:	<u>\$701,485.00</u>
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TOTAL CHILDREN'S CABINET AWARD	\$	<u>701,485.00</u>
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#### D. AFFIRMATION

The Local Management Board affirms that the information and estimates conveyed in this document (with the exception of the SECTION C above) are true and accurate to the best of its knowledge. The Governor's Office for Children affirms that the information and estimates conveyed above in SECTION C is true and accurate to the best of its knowledge.

Local Management Board Chair \_\_\_\_\_ Date \_\_\_\_\_

Local Management Board Point of Contact \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_  
 State Official Date

# BOARD SUPPORT BUDGET AND REVENUE Fiscal Year 2020

LINE: Worcester County Initiative to Preserve Families

DESCRIPTION	Community Partnership Agreement		Total	Budget Narrative
	Children's Cabinet Funds	Non-Children's Cabinet Funds that Directly Support CPA (Cash + In-Kind)		
<b>Budget for Local Management Board Support</b>				
Salaries	77,412.00	0.00	\$77,412.00	For each Column C line item where funding is proposed (both Children's Cabinet and non-Children's Cabinet), enter below the calculations that show how the expense was derived. No entries are required for shaded lines.
Fringe Costs	37,756.00	0.00	\$37,756.00	100% Office Administrator I, 10/01 (\$13,467 x 40hrs x 52 weeks = \$28,372.80; 10/01 (\$28,372.80 x 16hrs x 52 weeks = \$23,565); 11.5% Coordinator of Special Programs II, 13/10 (\$18,56 x 4.6hrs x 52 weeks = \$4,438); 25% Coordinator of Special Programs II, 12/11 (\$24,79 x 10hrs x 52 weeks = \$12,883); 5% IT Staff 12/1 (\$20.66 x 2hrs x 52 weeks = \$2,148.64); 5% Fiscal Technician II, 11/9 (\$21.09 x 2hrs x 52 weeks = \$2,193)
Printing/Duplication	1,900.00	0.00	\$1,900.00	100% Office Administrator I, (\$19,156); 40% Program Director, 10/01 (\$16,419); 11.5% Coordinator of Special Programs II, 13/10 (\$2,433); 25% Coordinator of Special Programs II, 13/11 (\$6,192); 5% IT Staff 13/1 (\$1,801); 5% Fiscal Technician II, 11/9 (\$1,638) (\$19,156 + \$16,419 + \$2,433 + \$6,192 + \$1,801 + \$1,638 = \$37,756)
Postage	300.00	0.00	\$300.00	2 Telephone lines @ \$75/month (2 x \$75/month x 12 months = \$1,800)
Utilities	0.00	0.00	\$0	Postage and mailing material at \$25/month (\$25 x 12 months = \$300)
Advertising	2,000.00	0.00	\$2,000.00	Advertisement 4 @ \$500 each; Branded outreach and educational materials: Tangles/Fidget Spinner 250 @ \$3.00 = \$812.50; Memo books 250 @ \$1.55 = \$387.50
Office Supplies	600.00	0.00	\$600.00	Shredder bags @ \$25.00 x 2 = \$50; Shredder ON @ \$20.00 x 1 = \$20; Smead Note File Index @ \$19.50 x 4 = \$78; 2 Pocket folders @ \$22 x 4 = \$88; 8 Pack of Pens @ 20.75 x 4 = \$83; Large Binder Clips @ \$17.50 x 4 = \$70; Office Chairs @ \$104 x 1 = \$104;
Insurance	0.00	0.00	\$0	400 tri-fold brochures @ \$1.25 each (400 x \$1.25 = \$500); 2000 resource guides at \$1.00 each (2,000 x \$1.00 = \$2,000)
Rent/Mortgage	0.00	0.00	\$0	
Printing/Duplication	2,500.00	0.00	\$2,500.00	
Information System	0.00	0.00	\$0	
Vehicle Operating (other than Insurance)	0.00	0.00	\$0	
Business Travel	1,800.00	0.00	\$1,800.00	\$150/month for travel
Conferences/Conventions	46,122.00	0.00	\$46,122.00	Sponsorship for training/conferences including: No such thing as a free ride @ \$3,511 x 2 = \$7,022; Rural Equity Training @ \$3,500 x 2 = \$7,000; Framework for Understanding Poverty, trainer certification @ \$1,300 x 2 = \$2,600; Bridge out of Poverty work shop @ \$5,200 a person x 40 people = \$20,800; Trauma-Informed Care Training and Consulting @ \$2,500 per day x 3 days = \$7,500; Annual National Council Trauma-Informed Care Learning Community @ \$10,000
Training	2,000.00	0.00	\$2,000.00	4 trainings @ \$500 each (includes registration, travel and meal reimbursement, \$100 for registration fee) + 100 hotel accommodations + \$55.00 meal reimbursement x (50.59 x 230 miles = \$133) x 4 (times) = \$10,000; 80hrs of website consultant work @ \$100.00 an hour (80hrs x \$100 = \$8,000); 400hrs for Epidemiologist @ \$400 to collect and analyze data, community plan needs, planning and implementation of ACES training schedule with follow up (400hrs x \$40 = \$16,000) 40hrs Accountant consultant @ \$250 to monitor program (\$25,000+\$1,000)
Consultant (other than Legal & Accounting/Auditing)	25,000.00	0.00	\$25,000.00	
Legal	0.00	0.00	\$0	
Accounting/Auditing	0.00	0.00	\$0	
Office Equipment	3,500.00	0.00	\$3,500.00	Purchase 2 laptop and 2 docking station equipment for ICT coordinator and Administrative Staff
Vehicle Purchase and Lease	0.00	0.00	\$0	
Program Supplies (not included in Board Support)	22,412.00	0.00	\$22,412.00	10% indirect to support LMB. This includes HR support, fiscal support, accounting, IT needs, software needs
Professional Dues/Publications/Subscriptions	800.00	0.00	\$800.00	MOA dues @ \$600 annual; \$200 for yearly PO Box
Food	0.00	0.00	\$0	
<b>TOTAL Budget for Board Support</b>	<b>\$137,400.00</b>	<b>\$0.00</b>	<b>\$137,400.00</b>	
<b>Revenue Sources for Non-Children's Cabinet Funds that Directly Support CPA (Cash)</b>				
County (City) Direct Revenue (Cash)		0.00	0.00	
County (City) In-Kind		0.00	0.00	
Fee for Service		0.00	0.00	
Other (Enter Source Here)		0.00	0.00	
<b>TOTAL Non-Children's Cabinet Revenue that Directly Supports CPA (Children's Cabinet FUNDING REQUEST)</b>	<b>\$22,412.00</b>	<b>\$0.00</b>	<b>\$22,412.00</b>	
<b>TOTAL Revenue-Children's Cabinet + Other Sources Used to Support CPA</b>			<b>\$22,412.00</b>	

**LMB: Worcester County Initiative to Preserve Families**

[illegible]

Revenue Sources for Non-Children's Cabinet Funds that Directly Support CPA Operations (Admin + Programs):		
County/City Direct Revenue (Cash)		112,457.00
County/City In-Kind		0.00
Fee for Service		0.00
Community Foundation of the Eastern Shore		5,000.00
Other (Enter Source Here)		0.00
<b>TOTAL Non-Children's Cabinet Revenue that Directly Supports CPA</b>		<b>\$117,457</b>
CPA/Children's Cabinet FUNDING REQUEST	\$477,370	
<b>TOTAL Revenue from Children's Cabinet and Other Sources Used to Support CPA</b>		<b>\$594,827</b>

**SCHEDULE OF COMMUNITY PARTNERSHIP AGREEMENT - BUDGET AND REVENUE PROJECTIONS**  
**Fiscal Year 2020**

DESCRIPTION	Community Partnership Agreement	Children's Cabinet	Non-Children's Cabinet Funds that Directly Support CFA Operations (Cash + In-Kind)	Total
<b>Programs/Partnerships:</b>				
Salaries		74,500.00	0.00	74,500.00
Travel Costs		21,750.00	0.00	21,750.00
Communications		2,000.00	0.00	2,000.00
Per Diem		381.00	0.00	381.00
Advertising		400.00	0.00	400.00
Office Supplies		2,575.00	0.00	2,575.00
Insurance		1,000.00	0.00	1,000.00
Real Estate		6,887.00	0.00	6,887.00
Printing/Copying		775.00	0.00	775.00
Information System Support/Maintenance		317.00	0.00	317.00
Vehicle Operating (other than Insurance)		0.00	0.00	0.00
Business Travel		4,300.00	0.00	4,300.00
Conference/Convention		2,000.00	0.00	2,000.00
Training		0.00	0.00	0.00
Consultant (other than Legal & Accounting/auditing)		0.00	0.00	0.00
Legal		0.00	0.00	0.00
Accounting/auditing		0.00	0.00	0.00
Office Equipment		27.00	0.00	27.00
Vehicle purchase and lease		0.00	0.00	0.00
Program Supplies		0.00	0.00	0.00
Professional Development (other than Publications)		345.00	0.00	345.00
Other (Specify): Staff recruitment		150.00	0.00	150.00
Other (Specify): Participant costs		23,300.00	0.00	23,300.00
Other (Specify): Indirect		6,887.00	0.00	6,887.00
<b>TOTAL Budget for:</b>		<b>143,000.00</b>	<b>0.00</b>	<b>143,000.00</b>
<b>Revenue Sources:</b>				
County/City Direct Revenue (Cash)		0.00	0.00	0.00
County/City In-Kind		0.00	0.00	0.00
Community Contribution of the System Share		0.00	0.00	0.00
Other (Specify Source Name)		0.00	0.00	0.00
<b>TOTAL Non-Children's Cabinet Revenue that Directly Supports CFA</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>TOTAL Children's Cabinet Revenue that Directly Supports CFA</b>		<b>143,000.00</b>	<b>0.00</b>	<b>143,000.00</b>
<b>TOTAL Revenue from Children's Cabinet and Other Revenue Used to Support CFA</b>		<b>143,000.00</b>	<b>0.00</b>	<b>143,000.00</b>

1202 - Worcester County Initiative to Preserve Facilities

DESCRIPTION		Community Partnership Agreement		Budget Narrative
Program Personnel: Budgeted To Fully Support Government County Health Department	Children's Cabinet	Non-Children's Cabinet Funds Not Directly Support CFA Operations (Each = Indirect)	Total	For each Cabinet Case Team where funding is proposed, enter below the calculations that show how the expenses were derived. The salaries are required for detailed items.
Salaries	\$7,081.00	0.00	\$7,081.00	COP II 13/2 Salary \$41,638*50 = \$20,819; COP II 14/8 Salary \$51,158*50 = \$25,579; Social Worker II 25/6 14/9 Salary \$51,831*25 = \$12,958 (\$57,313 + \$25,797 + \$12,958 = \$96,068) = 8 months = \$87,251
Employer Costs	48,944.00	0.00	\$48,944.00	Fringe benefits (health insurance, retiree health insurance, FICA, workmans comp) Fringe \$36,405*50 = \$18,203; Fringe \$39,208*50 = \$19,604; Fringe \$39,774*25 = \$9,944 (\$32,785+\$9,984+\$8,944) = 9 months = \$64,660
Communications	2,175.00	0.00	\$2,175.00	13/2 month for 9 months for blueprint and fax (\$120) 8 months = \$960
Postage	318.00	0.00	\$318.00	Average costs for program mailings - \$0.55 for 156 stamps for mailing referral packets, applications, outreach - some would be packets which range from \$0.55 - \$1.25/packet and others would be postage at \$0.25/packet (\$0.25 x 156)
Utilities	6.00	0.00	\$6.00	
Advertising	688.00	0.00	\$688.00	150 per month for 9 months for advertising ads, brochures, programs materials (\$60 x 9 = \$540)
Office Supplies	1,588.00	0.00	\$1,588.00	\$250 for printer ink \$250 x 4 = \$1,000; Shredder bags @ \$28.00 x 2 = \$56; Shredder Oil @ \$18.00 x 1 = \$18; Sewal Note File Jackets @ \$18.50 x 4 = \$74; 2 Pocket Folders @ \$22x 8 = \$176; 8 Pack of Pens @ 20.72 x 4 = \$83; Large Binder Oils @ \$17.50 x 4 = \$70; \$1,000 + \$58 = \$18 + \$117 = \$154 + \$83 =
Insurance	8.00	0.00	\$8.00	
Rent/Lease	8.00	0.00	\$8.00	
Printing/Reproduction	6.00	0.00	\$6.00	
Information System (Equipment/Maintenance)	6.00	0.00	\$6.00	
Vehicle Operating (Other than Insurance)	8.00	0.00	\$8.00	
Travel	1,000.00	0.00	\$1,000.00	In total travel costs of 120 miles per week at the current state reimbursement rate (for 39 weeks) (108 x 39) (\$6.59 x 2,900 miles = \$2,301); Travel expenses for two trainings: (200 x \$5.59 mileage = \$1,118 x 2 = \$2,236) + meals (\$59.00 state reimbursement rate x 2 = \$118) = \$334. Total \$2,301 + \$258 = \$2,559
Business Travel	2,452.00	0.00	\$2,452.00	
Conferences/Conventions	6.00	0.00	\$6.00	
Training	2,648.00	0.00	\$2,648.00	2 trainings for staff on Preventing Educational Abuse from and/or Impact of Harassment @ \$1,072 x 2 = \$2,144
Consultant (Other than Legal & Accounting/Auditing)	1.00	0.00	\$1.00	
Legal	8.00	0.00	\$8.00	
Accounting/Auditing	8.00	0.00	\$8.00	
Office Equipment	8.00	0.00	\$8.00	
Program Supplies	13,448.00	0.00	\$13,448.00	
Professional Fees/Public Relations/Consultations	8.00	0.00	\$8.00	
Indirect	12,448.00	0.00	\$12,448.00	100% indirect cost
Other (Specify)	8.00	0.00	\$8.00	
Other (Specify)	8.00	0.00	\$8.00	
<b>TOTAL: Expenses for Non-Children's Cabinet Funds Not Directly Support CFA Operations:</b>	<b>\$13,448.00</b>	<b>\$0.00</b>	<b>\$13,448.00</b>	
Program Personnel: Budgeted To Fully Support Government County Health Department				
Salaries	\$7,081.00	0.00	\$7,081.00	
Employer Costs	48,944.00	0.00	\$48,944.00	
Communications	2,175.00	0.00	\$2,175.00	
Postage	318.00	0.00	\$318.00	
Utilities	6.00	0.00	\$6.00	
Advertising	688.00	0.00	\$688.00	
Office Supplies	1,588.00	0.00	\$1,588.00	
Insurance	8.00	0.00	\$8.00	
Rent/Lease	8.00	0.00	\$8.00	
Printing/Reproduction	6.00	0.00	\$6.00	
Information System (Equipment/Maintenance)	6.00	0.00	\$6.00	
Vehicle Operating (Other than Insurance)	8.00	0.00	\$8.00	
Travel	1,000.00	0.00	\$1,000.00	
Business Travel	2,452.00	0.00	\$2,452.00	
Conferences/Conventions	6.00	0.00	\$6.00	
Training	2,648.00	0.00	\$2,648.00	
Consultant (Other than Legal & Accounting/Auditing)	1.00	0.00	\$1.00	
Legal	8.00	0.00	\$8.00	
Accounting/Auditing	8.00	0.00	\$8.00	
Office Equipment	8.00	0.00	\$8.00	
Program Supplies	13,448.00	0.00	\$13,448.00	
Professional Fees/Public Relations/Consultations	8.00	0.00	\$8.00	
Indirect	12,448.00	0.00	\$12,448.00	
Other (Specify)	8.00	0.00	\$8.00	
Other (Specify)	8.00	0.00	\$8.00	
<b>TOTAL: Expenses for Non-Children's Cabinet Funds Not Directly Support CFA Operations:</b>	<b>\$13,448.00</b>	<b>\$0.00</b>	<b>\$13,448.00</b>	
Program Personnel: Budgeted To Fully Support Government County Health Department				
Salaries	\$7,081.00	0.00	\$7,081.00	
Employer Costs	48,944.00	0.00	\$48,944.00	
Communications	2,175.00	0.00	\$2,175.00	
Postage	318.00	0.00	\$318.00	
Utilities	6.00	0.00	\$6.00	
Advertising	688.00	0.00	\$688.00	
Office Supplies	1,588.00	0.00	\$1,588.00	
Insurance	8.00	0.00	\$8.00	
Rent/Lease	8.00	0.00	\$8.00	
Printing/Reproduction	6.00	0.00	\$6.00	
Information System (Equipment/Maintenance)	6.00	0.00	\$6.00	
Vehicle Operating (Other than Insurance)	8.00	0.00	\$8.00	
Travel	1,000.00	0.00	\$1,000.00	
Business Travel	2,452.00	0.00	\$2,452.00	
Conferences/Conventions	6.00	0.00	\$6.00	
Training	2,648.00	0.00	\$2,648.00	
Consultant (Other than Legal & Accounting/Auditing)	1.00	0.00	\$1.00	
Legal	8.00	0.00	\$8.00	
Accounting/Auditing	8.00	0.00	\$8.00	
Office Equipment	8.00	0.00	\$8.00	
Program Supplies	13,448.00	0.00	\$13,448.00	
Professional Fees/Public Relations/Consultations	8.00	0.00	\$8.00	
Indirect	12,448.00	0.00	\$12,448.00	
Other (Specify)	8.00	0.00	\$8.00	
Other (Specify)	8.00	0.00	\$8.00	
<b>TOTAL: Expenses for Non-Children's Cabinet Funds Not Directly Support CFA Operations:</b>	<b>\$13,448.00</b>	<b>\$0.00</b>	<b>\$13,448.00</b>	
Program Personnel: Budgeted To Fully Support Government County Health Department				
Salaries	\$7,081.00	0.00	\$7,081.00	
Employer Costs	48,944.00	0.00	\$48,944.00	
Communications	2,175.00	0.00	\$2,175.00	
Postage	318.00	0.00	\$318.00	
Utilities	6.00	0.00	\$6.00	
Advertising	688.00	0.00	\$688.00	
Office Supplies	1,588.00	0.00	\$1,588.00	
Insurance	8.00	0.00	\$8.00	
Rent/Lease	8.00	0.00	\$8.00	
Printing/Reproduction	6.00	0.00	\$6.00	
Information System (Equipment/Maintenance)	6.00	0.00	\$6.00	
Vehicle Operating (Other than Insurance)	8.00	0.00	\$8.00	
Travel	1,000.00	0.00	\$1,000.00	
Business Travel	2,452.00	0.00	\$2,452.00	
Conferences/Conventions	6.00	0.00	\$6.00	
Training	2,648.00	0.00	\$2,648.00	
Consultant (Other than Legal & Accounting/Auditing)	1.00	0.00	\$1.00	
Legal	8.00	0.00	\$8.00	
Accounting/Auditing	8.00	0.00	\$8.00	
Office Equipment	8.00	0.00	\$8.00	
Program Supplies	13,448.00	0.00	\$13,448.00	
Professional Fees/Public Relations/Consultations	8.00	0.00	\$8.00	
Indirect	12,448.00	0.00	\$12,448.00	
Other (Specify)	8.00	0.00	\$8.00	
Other (Specify)	8.00	0.00	\$8.00	
<b>TOTAL: Expenses for Non-Children's Cabinet Funds Not Directly Support CFA Operations:</b>	<b>\$13,448.00</b>	<b>\$0.00</b>	<b>\$13,448.00</b>	
Program Personnel: Budgeted To Fully Support Government County Health Department				
Salaries	\$7,081.00	0.00	\$7,081.00	
Employer Costs	48,944.00	0.00	\$48,944.00	
Communications	2,175.00	0.00	\$2,175.00	
Postage	318.00	0.00	\$318.00	
Utilities	6.00	0.00	\$6.00	
Advertising	688.00	0.00	\$688.00	
Office Supplies	1,588.00	0.00	\$1,588.00	
Insurance	8.00	0.00	\$8.00	
Rent/Lease	8.00	0.00	\$8.00	
Printing/Reproduction	6.00	0.00	\$6.00	
Information System (Equipment/Maintenance)	6.00	0.00	\$6.00	
Vehicle Operating (Other than Insurance)	8.00	0.00	\$8.00	
Travel	1,000.00	0.00	\$1,000.00	
Business Travel	2,452.00	0.00	\$2,452.00	
Conferences/Conventions	6.00	0.00	\$6.00	
Training	2,648.00	0.00	\$2,648.00	
Consultant (Other than Legal & Accounting/Auditing)	1.00	0.00	\$1.00	
Legal	8.00	0.00	\$8.00	
Accounting/Auditing	8.00	0.00	\$8.00	
Office Equipment	8.00	0.00	\$8.00	
Program Supplies	13,448.00	0.00	\$13,448.00	
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Program Personnel: Budgeted To Fully Support Government County Health Department				
Salaries	\$7,081.00	0.00	\$7,081.00	
Employer Costs	48,944.00	0.00	\$48,944.00	
Communications	2,175.00	0.00	\$2,175.00	
Postage	318.00	0.00	\$318.00	
Utilities	6.00	0.00	\$6.00	
Advertising	688.00	0.00	\$688.00	
Office Supplies	1,588.00	0.00	\$1,588.00	
Insurance	8.00	0.00	\$8.00	
Rent/Lease	8.00	0.00	\$8.00	
Printing/Reproduction	6.00	0.00	\$6.00	
Information System (Equipment/Maintenance)	6.00	0.00	\$6.00	
Vehicle Operating (Other than Insurance)	8.00	0.00	\$8.00	
Travel	1,000.00	0.00	\$1,000.00	
Business Travel	2,452.00	0.00	\$2,452.00	
Conferences/Conventions	6.00	0.00	\$6.00	
Training	2,648.00	0.00	\$2,648.00	
Consultant (Other than Legal & Accounting/Auditing)	1.00	0.00	\$1.00	
Legal	8.00	0.00	\$8.00	
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Page 5 of 7



# **SCHEDULE OF COMMUNITY PARTNERSHIP AGREEMENT - BUDGET AND REVENUE PROJECTIONS** **Fiscal Year 2020**

LMB: Worcester County Initiative to Preserve Families

DESCRIPTION	Community Partnership Agreement		Total	Budget Narrative
	Children's Cabinet	Non-Children's Cabinet Funds that Directly Support CPA Operations (Cash + In-Kind)		
<b>Operating Expenses (Local CPA's Cabinet Coordinator)</b>				
Salaries	\$2,884.00	0.00	\$2,884.00	
Fringe Costs	\$4,161.00	0.00	\$4,161.00	Coordinator of Special Programs II: Actual salary: \$38,601 x 88.5% = \$34,161
Operating Expenses	\$6,045.00	0.00	\$6,045.00	Actual Fringe costs for position: \$21,157 x 88.5% = \$18,723
Communications	0.00	0.00	\$0	
Postage	0.00	0.00	\$0	
Utilities	0.00	0.00	\$0	
Advertising	0.00	0.00	\$0	
Office Supplies	0.00	0.00	\$0	
Insurance	0.00	0.00	\$0	
Rent/Mortgage	0.00	0.00	\$0	
Printing/Duplication	0.00	0.00	\$0	
Information System Repair/Maintenance	0.00	0.00	\$0	
Vehicle Operating (other than Insurance)	0.00	0.00	\$0	
Travel	0.00	0.00	\$0	
Business Travel	0.00	0.00	\$0	
Conferences/Conventions	0.00	0.00	\$0	
Training	0.00	0.00	\$0	
Consultant (other than Legal & Accounting/Auditing)	0.00	0.00	\$0	
Legal	0.00	0.00	\$0	
Accounting/Auditing	0.00	0.00	\$0	
Office Equipment	0.00	0.00	\$0	
Vehicle purchase and lease	0.00	0.00	\$0	
Program Supplies	0.00	0.00	\$0	
Professional Fees/Publications/Subscriptions	0.00	0.00	\$0	
Food	0.00	0.00	\$0	
Other (specify)	0.00	0.00	\$0	
Other (specify)	0.00	0.00	\$0	
<b>TOTAL Budget for Local CPA Team Coordinator</b>	<b>\$6,045.00</b>	<b>\$0.00</b>	<b>\$6,045.00</b>	
<b>Revenue Sources for Non-Children's Cabinet Funds that Directly Support CPA Operations:</b>				
County/City Direct Revenue (Cash)		0.00		
County/City In-Kind		0.00		
Fee for Service		0.00		
Community Foundation of the Eastern Shore		0.00		
Other (Enter Source Here)		0.00		
<b>TOTAL Non-Children's Cabinet Revenue that Directly Supports CPA</b>		<b>\$0.00</b>		
<b>CPA/Children's Cabinet FUNDING REQUEST</b>	<b>\$6,045.00</b>	<b>\$0.00</b>	<b>\$6,045.00</b>	
<b>TOTAL Revenue from Children's Cabinet and Other Sources Used to Support CPA</b>			<b>\$6,045.00</b>	



# WORCESTER COUNTY LOCAL BEHAVIORAL HEALTH AUTHORITY

*Working together for healthier communities!*

4

**TO:** Harold Higgins, Chief Administrative Officer  
**FROM:** Jessica Sexauer, Director of the Local Behavioral Health Authority  
**DATE:** January 27, 2020  
**SUBJECT:** Adult Mental Health Targeted Case Management Services

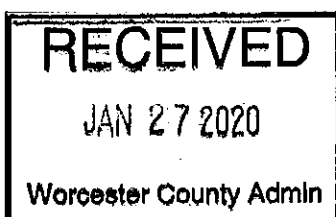
The Worcester County Local Behavioral Health Authority is requesting proposals from qualified organizations to implement Adult Mental Health Targeted Case Management services for adults within the Fee-for-Service Public Behavioral Health System in Worcester County.

Please note that no grant funds will be awarded through this procurement. All services will be paid for by accessing reimbursement through Maryland's Public Behavioral Health System's Administrative Services Organization (ASO).

Enclosed is a copy of the Request for Proposal, including the evaluation criteria for the proposal, and a vendor list. Thank you for your time and support in this matter. Should you have any questions, please feel free to contact me at 410-632-3366.

Cc: Kelly Shannahan, Assistant Chief Administrative Officer

Enclosures (2)



1a

**Worcester County Local Behavioral Health Authority**

**REQUEST FOR PROPOSALS**

**FOR**

**ADULT MENTAL HEALTH TARGETED  
CASE MANAGEMENT SERVICES**

**January 27, 2020**

## **I. BACKGROUND AND OVERVIEW**

Each Local Behavioral Health Authority (LBHA) acting as the designee of the Maryland Department of Health (hereafter known as “the Department”), shall complete a competitive procurement for its respective jurisdiction. Worcester County Local Behavior Health Authority (WCLBHA) is responsible for planning, managing, and monitoring of publicly funded mental health services at the local level. This responsibility includes the competitive selection at least once every five years of one or more qualified community mental health providers to render Targeted Case Management (TCM) for adults within the Fee-for-Service (FFS) Public Behavioral Health System (PBHS) in Worcester County.

This Request for Proposal (RFP) pursuant to the authority and requirements set forth in the Section 1915(b) (4) Waiver and in accordance with the applicable provisions of Targeted Case Management Medicaid State Plan Amendment (SPA), solicits applications to provide mental health Targeted Case Management (TCM) services for eligible adults with Serious Mental Illness (SMI). Worcester County is in full compliance with the Code of Maryland Regulations (COMAR) 10.09.45 or its successors. The Department has several changes under consideration with respect to the regulation, accreditation and oversight of community behavioral health providers. As such, the selected applicant(s) agrees to adhere to all existing and future regulatory requirements, directives, policies, and protocols pertaining to mental health case management issued by the department or its designee.

Targeted Case Management for Adults is not a grant-funded service. Selected applicants through this procurement shall commit to delivering all levels of care specified in the Scope of Service to both adult Medicaid beneficiaries and uninsured eligible adults. Participating Targeted Case Management (TCM) providers, subject to the approval of the department, shall be reimbursed through the Public Behavioral Health Systems (PBHS) Administrative Services Organization (ASO) for appropriately authorized and documented services to eligible adults in accordance with the tiered reimbursement schedule set forth in COMAR 10.21.25.09.

## **II. BIDDER QUALIFICATIONS**

Applicants must meet all of the following criteria to be eligible for consideration for selection as a mental health Targeted Case Management (TCM) provider for adults by means of this Request for Proposal (RFP):

- Be licensed under COMAR 10.63.03.04, 10.63.03.05, or 10.63.03.09, OR have three years of documented experience as a mental health case management provider by February 27, 2020.
- Be eligible for approval as a Mental Health Case Management provider pursuant to conditions set forth in COMAR 10.09.36.03 and any additional applicable provisions set forth in COMAR 10.09.45 regarding conditions for provider participation in Targeted Case Management (TCM).
- Have at least three years of experience providing mental health services to adults with Serious Mental Illness (SMI), including serving high risk and vulnerable populations.
- Have a physical site location within the jurisdiction by July 1, 2020.
- Have knowledge of the needs of the target population outlined in this Request for Proposal

(RFP) and the community resources available in Worcester County.

- Demonstrate operational capacity to serve the entire geographical area of Worcester County so that eligible adults have timely and sufficient access to Targeted Case Management (TCM) services within and throughout Worcester County.

If the successful bidder is a new Targeted Case Management (TCM) provider for adults in Worcester County the bidder shall collaborate with the Worcester County Local Behavioral Health Authority (WCLBHA) and the previous adult mental health Targeted Case Management (TCM) provider to effectively and seamlessly transfer all consumers enrolled in Targeted Case Management (TCM) at the time of the transition to the bidder's program, unless the consumer declines the offer and a specific exemption is granted by the Behavioral Health Administration.

### **III. SCOPE OF WORK**

Bidders must address all of the requirements in the Scope of Work in their response to this Request for Proposal (RFP).

#### **Overview**

The intent of Targeted Case Management (TCM) service for adults is to improve the overall quality of life of eligible adults with Serious Mental Illness (SMI) and to promote their long-term recovery. A primary focus of these services is to prevent homelessness and incarceration, to divert individuals from unnecessary inpatient emergency room use and institutional levels of care, wherever possible, and to increase community stability and tenure through referral to and engagement in behavioral health treatment and support services. Targeted Case Management (TCM) services for adults includes a comprehensive assessment to determine individual strengths and service needs; development of an individualized, person-centered plan of care with the individual and, with informed consent, his or her family and significant others; linkage to community resources including but not limited to housing; assistance in securing entitlements and benefits; linkage to behavioral and somatic health care; assistance in developing social support systems; monitoring of engagement in agreed upon services and supports; and advocacy on behalf of the individual.

For uninsured eligible adults, the Targeted Case Management (TCM) provider is expected to assist the individual to apply for Medicaid, as soon as clinically possible. For all Targeted Case Management (TCM) service recipients, Targeted Case Management (TCM) provider shall facilitate access to all benefits and entitlements for which the individual may be eligible, including but not limited to Medical Assistance, Medicare, Supplemental Security Income (SSI), Social Security Disability Insurance (SSDI), Supplemental Nutrition Assistance Program (SNAP) and Temporary Cash Assistance (TCA). Programs shall assist eligible adults to identify strengths, skills and resources to address their basic needs with the goal of transitioning the individual from Targeted Case Management (TCM) services to mental health treatment, rehabilitation, and ancillary services, while mobilizing natural supports wherever possible.

#### **Participant Eligibility:**

##### **Target Population**

A recipient is eligible for mental health case management services if the recipient is in a federal eligibility category for, and is enrolled in, the Maryland Medical Assistance Program according to COMAR 10.09.24, OR meets uninsured eligibility criteria established by the Behavioral Health Administration for mental health case management services within the Public Behavioral Health Systems (PBHS). Targeted

Case Management (TCM) provider for adults shall serve all adults desiring mental health case management services who meet the financial eligibility requirements and medical necessity criteria for Targeted Case Management (TCM).

Services shall be provided to:

Adults who have a serious mental health disorder, diagnosed according to a current diagnostic and statistical manual of the American Psychiatric Association that is recognized by the Secretary, and who are:

- at risk of, or need continued community treatment to prevent inpatient psychiatric treatment;
- elderly individuals, age 65 or older, or young adults ages 18 through 21 who have been discharged from inpatient treatment in an Institution for Mental Disease (IMD);
- at risk of or need continued community treatment to prevent being homeless; OR
- at risk of incarceration or recently released from a detention center or prison.

The specific diagnostic criteria may be waived for the following two conditions:

- An individual, committed as not criminally responsible, who is conditionally released from a Behavioral Health Administration facility, according to the provisions of Health General Article, Title 12, Annotated Code of Maryland; or
- An individual in a Behavioral Health Administration facility or a Behavioral Health Administration funded inpatient psychiatric hospital that requires community services. This excludes individuals eligible for Developmental Disabilities Administration's residential services.

### **Service Requirements:**

Participants shall meet the above requirements and be classified according to the following levels of service based on medical necessity criteria established for each level of service:

Level I – General: A minimum of one (1) and a maximum of two (2) units of service per month and based on the severity of the participant's mental illness, the participant must meet at least one of the following conditions:

- The participant is not linked to mental health and medical services;
- The participant lacks basic supports for shelter, food, and income;
- The participant is transitioning from one level of care to another level of care; or
- The participant needs case management services to maintain community-based treatment and services.

Level II – Intensive: A minimum of two (2) and a maximum of five (5) units of service per month and based on the severity of the participant's mental illness, the participant must meet two or more of the following conditions:

- The participant is not linked to mental health and medical services;
- The participant lacks basic supports for shelter, food, and income;
- The participant is transitioning from one level of care to another level of care; or



- The participant needs case management services to maintain community-based treatment and services.

A home visit by the Community Support Specialist or Community Support Specialist Associate shall be provided for each participant at minimum every 90 days.

### **Service Reimbursement:**

The unit of service is one day, with a minimum of one-hour per day of contact, which may include face-to-face contacts with a participant, and non-face-to-face contacts on behalf of the participant with nonparticipants, that are directly related to identifying the needs and supports for helping the individual to access needed services. Participants in Level I receive a minimum of 30 minutes of face-to face contact monthly and a maximum of three (3) hours, and participants in Level II receive a minimum of one (1) hour of face-to-face contact monthly and a maximum of ten (10) hours. This includes all Targeted Case Management (TCM) activities except for the assessment, which uses a unit of service and is billed separately. Each participant shall be reassessed after the initial assessment at a minimum of once every six (6) months. The maximum service limit may be exceeded based on clinical review by the Department or the Administrative Services Organization (ASO).

For individuals who are transitioning to a community setting, mental health case management services may be made available for up to 30 consecutive days of the covered stay in the institution. This does not include adults between the ages of 22 and 64 who are served in Institutions for Mental Disease (IMD) or are adults who are inmates of public institutions.

The provider shall be reimbursed according to the requirements in this chapter and the fees established under COMAR 10.21.25.

### **Service Definition:**

In addition to the emphasis on securing needed benefits and entitlements, Targeted Case Management (TCM) services are provided to assist participants in gaining access to needed medical, mental health, social, educational, and other services. When Targeted Case Management (TCM) services have been appropriately authorized and documented, the following activities and interventions are reimbursable through Targeted Case Management (TCM):

Please refer to COMAR 10.09.45.06 for a full description of each of these services.

- Comprehensive Assessment and Periodic Reassessment;
- Development and Periodic Revision of a Specific Care Plan;
- Referrals and Related Activities;
- Monitoring and Follow-up Activities; and
- Participant Advocacy

### **General Program Requirements:**

The participating case management program shall be enrolled as a Medicaid provider and meet all the conditions for provider participation as set forth in COMAR 10.09.36.03 and any additional applicable provisions set forth in COMAR 10.09.45 regarding conditions for provider participation in Targeted Case

Management (TCM). In addition to the participation requirements, the provider shall ensure compliance with all the Medical Assistance provisions listed in COMAR 10.09.45 designated for Targeted Case Management services for adults and applicable to both adult Medicaid beneficiaries and uninsured eligible adults who meet Medical Necessity Criteria for Targeted Case Management (TCM).

All covered services under this chapter shall be preauthorized. Before a participant receives case management services, the Behavioral Health Administration or the Administrative Services Organization (ASO) reviews the authorization request, determines if the participant meets medical necessity criteria, and if the participant meets the criteria, the participant is authorized for case management services. The Administrative Services Organization (ASO) shall approve and monitor plans of care which designate the level of service to be delivered. Plans of care must be updated to correctly reflect the level of intensity in which the participant is currently enrolled. If it is determined that the provider is failing to provide adequate services as approved in the plan of care, the provider shall be subject to a corrective action plan to remediate the identified deficiencies

### **Specific Program Requirements:**

The selected Targeted Case Management (TCM) provider for adults shall:

1. Place no restrictions on the qualified participant's right to elect to or decline to receive mental health case management services as authorized by the department or the department's designee, or to choose a Community Support Specialist or Associate as approved by the department or the department's designee.
2. Employ appropriately qualified individuals as Community Support Specialists and Community Support Specialist Associates with relevant work experience, including experience with the populations served by the program, including but not limited to adults with a serious mental health disorder.
3. Assure that a participant's initial assessment shall be completed within 20 days after the participant has been authorized by the department or the Administrative Services Organization (ASO) and determined eligible for, and has elected to receive, mental health case management services. An initial Care Plan shall be completed within 10 days after completion of the initial assessment.
4. Have formal written policies and procedures, approved by the department, which specifically, address the provision of mental health case management services to participants in accordance with these requirements
5. Be available to participants and, as appropriate, the participant's families for 24 hours a day, 7 days a week in order to refer participants to needed services and supports and in a psychiatric emergency, to refer to mental health treatment and evaluation services in order to prevent the participant from accessing a higher level of care.
6. Respect the participants' rights to decline case management services and, as applicable, document the participant's decision to decline services in the participant's case management record.
7. Designate specific qualified staff to provide mental health case management services that shall include at least one Community Support Specialist per agency and may include a Community Support Specialist Associate.
8. Refrain from providing other services to participants which would be viewed by the Department as a conflict of interest.

9. Be knowledgeable of the eligibility requirements and application procedures of federal, State, and local government assistance programs which are applicable to participants.
10. Maintain information on current resources for mental health, medical, social, financial assistance, vocational, educational, housing, and other support services.
11. Safeguard the confidentiality of the participant's records in accordance with State and federal laws and regulations governing confidentiality.
12. Comply with the department's fiscal reporting requirements and submit reports in the manner specified by the department.
13. Comply with the requirements for the delivery of mental health services outlined by the Department.

### **Required Staff**

The mental health case management provider shall have staff that is sufficient in numbers and qualifications to provide appropriate services to the participants served and shall include, at a minimum:

1. A Community Support Specialist Supervisor who:
  - Is a mental health professional who is licensed and legally authorized to practice under the Health Occupations Article, Annotated Code of Maryland, and who is licensed under Maryland Practice Boards in the profession of either Social Work, Professional Counseling, Psychology, Nursing, Occupational Therapy, or Medicine.
  - Has one year of experience in mental health working as a supervisor.
  - Provides clinical consultation and training to community support specialists or associates regarding serious mental illness.
  - Is employed or contracted to supervise case management services at a ratio of one supervisor to every eight community support specialists or associates.
2. A Community Support Specialist who has at least a:
  - Bachelor's degree in a mental health field and one year of mental health experience, including mental health peer support; or
  - Bachelor's degree in a field other than mental health and two years of mental health experience, including mental health peer support;
  - Is chosen as the case manager by the participant or the participant's legally authorized representative; and
  - Is employed by the mental health case management provider to provide case management services to participants.
3. A Community Support Specialist Associate who:
  - Has at least a high school diploma or the equivalent, and 2 years of experience with individuals with mental illness, including mental health peer support;
  - Is employed by the mental health case management provider to assist Community Support Specialists in the provision of mental health case management services to participants; and
  - Works under the supervision of a Community Support Specialist who delegates specific tasks to the Associate.

## **Case Record Requirements:**

The successful bidder shall maintain a file for each participant which includes all the following:

1. An initial referral and intake form with identifying information, including, but not limited to, the individual's name and Medicaid identification number;
2. A written agreement for services signed by the participant or the participant's legally authorized representative and by the participant's community support specialist;
3. An assessment as specified in COMAR 10.09.45.06.

A Care Plan, updated at a minimum of every 6 months, which contains at a minimum:

- A description of the participant's strengths and needs;
  - The diagnosis established as evidence of the participant's eligibility for services under this chapter;
  - The goals of case management services, with expected target dates;
  - The proposed intervention;
  - Designation of the community support specialist with primary responsibility for implementation of the Care Plan; and
  - Signatures of the community support specialist, participant, or the participant's legally authorized representative, and significant others, if appropriate.
5. An ongoing record of contacts made on the participant's behalf, which includes all the following:
    - Date and subject of contact;
    - Individual contacted;
    - Signature of community support specialist or community support specialist associate making the contact;
    - Nature, content, and unit or units of service provided;
    - Place of service;
    - Whether goals specified in the care plan have been achieved;
    - The timeline for obtaining needed services;
    - The timeline for reevaluation of the plan;
    - The need for and occurrences of coordination with other case managers; and
    - Monthly summary notes, which reflect progress made towards the participant's stated goals.

## **IV. QUALITY STANDARDS AND CONTRACT MONITORING:**

### **Quality Standards**

The Local Behavior Health Authority and the Department are committed to ensuring that Targeted Case Management (TCM) services are of high quality and responsive to the needs of eligible adults with serious mental illness. Providers that do not meet the requirements as outlined in this Request for

Proposal (RFP) and in applicable COMAR shall be subject to a Corrective Action Plan, with additional follow-up monitoring by the Worcester County Local Behavioral Health Authority (WCLBHA) to ensure that the requirements are being met. In the event that the Targeted Case Management (TCM) provider is unable or unwilling to meet the requirements as specified by this Request for Proposal (RFP), the department or Worcester County Local Behavioral Health Authority (WCLBHA) reserves the right to terminate the contract with the provider and re-issue a competitive solicitation for a replacement Targeted Case Management (TCM) provider.

### **Contract Monitoring**

Worcester County Local Behavioral Health Authority (WCLBHA) and the department shall engage in ongoing, periodic monitoring activities to evaluate the quality of service delivery and essential ingredients of the program. Activities shall include, but are not limited to the following:

- At least (1) site visit annually to evaluate and document compliance with administrative and programmatic requirements, including but not limited to evidence in the medical record of a diversity of referral sources and relationships with relevant organizations for referral and linkage to care.
- Review of administrative data reports and claims data to evaluate program effectiveness.
- Review of policy and personnel records to ensure administrative compliance.
- Participation in any provider meetings as required by the WCLBHA.
- Collection and submission of programmatic data, as required by the WCLBHA.

Providers selected through this Request for Proposal (RFP) shall be required to participate in all monitoring and evaluation activities.

### **V. LIMITATIONS:**

**A restriction may not be placed on a qualified service recipient's option to receive mental health case management services under Targeted Case Management TCM.**

**Mental health case management services do not restrict or otherwise affect:**

- Eligibility for Title XIX benefits or other available benefits or programs, unless the participant is receiving a comparable case management service under another Program.
- The freedom of a participant to select from all available services for which the participant is found to be eligible.

**Mental health case management providers may not receive reimbursement for:**

- The direct delivery of an underlying medical, educational, social, or other service to which a participant has been referred;
- Activities integral to the administration of foster care programs;
- Activities not consistent with the definition of case management services under Section 6052 of the federal Deficit Reduction Act of 2005 (P.L. 109-171);
- Activities to which third parties are liable to pay; or
- Activities delivered as part of institutional discharge planning.

**Reimbursement may not be made for mental health case management services if the participant is receiving a comparable case management service under Medicaid or another authority.**

**A participant's case manager may not be the participant's family member or direct service provider for the participant.**

## **VI. MECHANISMS TO INTEGRATE WITH EXISTING SYSTEM**

The applicants must address their financial ability to provide the scope of services requested at the quality desired and the legal liability associated with the operation of the proposed services. Applicants having current contracts with Behavioral Health Administration (BHA) or Worcester County Local Behavioral Health Authority must have demonstrated success in meeting outcome and program requirements.

## **VII. TIMELINE**

RFP release date	February 4, 2020
Pre- Bid proposal conference	February 21, 2020 at 9:00am Worcester County Health Department 6040 Landing Road Snow Hill, MD 21863 Room #231
Proposal due date	February 27, 2020 at 1:00pm Worcester County Government Center ATTN: Kelly Shannahan One West Market Street, Room 1103 Snow Hill, MD 21863-1195 410-632-1194
Review committee	March 6, 2020
Presentation to commissioners	March 19, 2020
Anticipated awarded notification date	March 23, 2020
Transition planning for enrolled clients	April 1 <sup>ST</sup> 2020- June 30, 2020
Anticipated contract signed start date	July 1, 2020

## **IX. PROPOSAL SUBMISSION AND CLOSING DATE**

The deadline of submission for proposals is **Februarys 27, 2020 at 1:00pm** to the Worcester County Administration office of the County Commissioners. Please submit one (1) original and five (5) copies of the proposal. No email or facsimile submissions will be accepted. Documents may be mailed at the applicant's risk. The Worcester County Local Behavior Health Authority (WCLBHA) is not responsible for late, lost, or misdirected mail. Proposals not received by the deadline will not be considered.



**Mailed proposals should be sent to:**

Worcester County Administration:  
Office of the County Commissioners  
Attn: **Kelly Shannahan** Assistant Chief Administrative Officer

Government Center  
One West Market Street, Room 1103  
Snow Hill, MD 21863-1195  
410-632-1194

**Cost of Proposal Preparation**

Any costs incurred by offerors in preparing or submitting proposals are the sole responsibility of the offers. Worcester County Local Behavioral Health Authority (WCLBHA) will not reimburse any offeror for any costs incurred in making a proposal or subsequent pre-contract discussions, presentations, or negotiations.

**Selection and Ad Hoc Committee**

A committee will be formed by the issuing Worcester County Local Behavioral Health (WCLBHA) to review the proposals, findings, recommendations and other pertinent items during this procurement. If an organizational conflict arises such that the Worcester County Local Behavioral Health (WCLBHA), because of other relationships with a prospective bidder or circumstances surrounding the bid submission of a prospective bidder, may be unable, or potentially unable, to render an impartial evaluation of a prospective bid or a determination of provider selection, the WCLBHA will immediately contact the Behavioral Health Administration, Director, Clinical Services Division (for Adults and Older Adults) at the following phone number: 410-402-8353 or the Assistant Director, Clinical Services Division (for Adults and Older Adults) at the following phone number: 410-402-8476.

No Worcester County Local Behavioral Health Authority (WCLBHA) staff member shall participate in any aspect of this procurement under such circumstances in which the local Health Department intends to submit a bid and the Worcester County Local Behavioral Health Authority (WCLBHA) serves as an agent of the local Health Department. In such instances in which an organizational conflict exists, WCLBHA will convene the selection committee, and shall have no role in the review of proposals, findings, recommendations, and other pertinent issues attendant to the selection of a Targeted Case Management (TCM) provider for adults. Behavioral Health Administration (BHA) shall retain in such cases the exclusive right to procure and select the successful offeror. Final acceptance of the deliverables will be made by the Worcester County Local Behavioral Health Authority, except wherein an organizational conflict exists as herein delineated.

**PROPOSAL SUBMISSION**

**Format of the Proposal**

Each offeror is required to submit a sealed package that bears the name of the offer or, the title Targeted Case Management (TCM) proposal, and the closing date for proposals on the outside of the package. Inside this package one (1) original and five (5) copies shall be the offeror's technical proposal.

## **Freedom of Information**

Offerors should give specific attention to the identification of those portions of their proposals that they deem to be confidential proprietary information or trade secrets and provide any justification why such material, upon request, should not be disclosed by Worcester County Local Behavioral Health Authority (WCLBHA) under the Maryland Public Information Act, State Government Article, Sections 10-611 et seq. annotated Code of Maryland.

Offerors are advised that the mere assertion of confidentiality is not sufficient to make matters confidential under the act. Information is confidential only if it is customarily so regarded in the trade and/or the withholding of the data would serve an objectively recognized private interest sufficiently compelling as to override the general disclosure policy of the act. In determining whether information designated as such is proprietary, Worcester County Local Behavioral Health Authority (WCLBHA) will follow the direction provided by its attorney when responding to requests for information contained in proposals.

It may be necessary that the entire contents of the proposal of the selected offeror be made available and reproduced for the purpose of examination and discussion by a broad range of interested parties.

## **XII. TECHNICAL AND FINANCIAL PROPOSAL CRITERIA**

### **Overview**

The proposal should address all points outlined in this Request for Proposal (RFP) and should be clear and precise in response to the information and requirements described. A transmittal letter should accompany the technical proposal. The sole purpose of this letter is to transmit the proposal. It should be brief and signed by an individual who is authorized to commit the offeror to the services and requirements as stated in this Request for Proposal (RFP).

### **Proposal Instructions and Narrative Outline**

The proposal should be a clear, concise narrative that describes the applicant's intent to serve the target population.

#### **1. Organizational Background**

- Describe the organization's history and experience providing similar mental health services to adults with serious mental illness. Submit relevant approval letters or licenses.
- Describe the organization's capacity to provide Targeted Case Management (TCM) services for adults, including your ability to adhere to the requirements under COMAR 10.09.45 and to access reimbursement through the Public Behavioral Health System.

#### **2. Description and Goals of the Mental Health Case Management Program**

- Describe how you plan to implement the Scope of Service and demonstrate how the approach would fulfill the goals and objectives described in this Request for Proposal (RFP).
- Describe the location of the office where the Mental Health Case Management program will be housed and the hours of operation.
- Describe other behavioral health services provided by your organization as well as any relationships your organization has with other provider entities and the structure/process you will use to avoid conflicts of interest and inappropriate self-referrals.

### 3. Program's Organizational Structure and Staffing Plan

- Describe the staffing pattern you will use to deliver the proposed services, including the supervisory roles and educational background and experience of staff to be assigned to this project. Include an organizational chart.
- Describe your plan to ensure that qualified staff is available 24 hours per day, 7 days per week to address crises and to prevent disruptions of service.
- Describe your plan to ensure adequate and appropriate supervision of staff, particularly for staff who often work offsite.
- Describe the training plan for staff.

### 4. Effectively Serving the Target Population

- Describe how your organization will ensure that all eligible individuals referred will be accepted into Mental Health Case Management services.
- Describe the program's referral process, how it will be inclusive and flexible, and how the program will market the program to generate referrals
- Describe how the program will use assertive outreach strategies to locate, engage, and enroll individuals viewed as challenging to serve.
- Describe how your organization will ensure that services are delivered in a culturally and linguistically competent manner, responsive to the diverse communities served.
- Describe how your organization will assess and work with individuals who have limited English proficiency, including the procedures in place to address service access for these individuals.

### 5. Program Evaluation and Quality Assurance

- Describe the program's anticipated outcomes and how you will track and monitor these outcomes.
- Describe the quality assurance process of the organization or program (e.g., client satisfaction surveys, program evaluation, etc.).
- Describe the data this program will collect, including how it will be collected, who will be responsible for collecting, analyzing, and storing the data.

### 6. Implementation Timeline

- Provide a timeline to establish and execute Mental Health Case Management services.

### 7. Appendices:

- *Appendix 1* – Current or most recent state approval letters or licenses that document experience providing mental health services in Maryland under COMAR 10.63.03.04 (Mobile Treatment Services), 10.63, 03.05 (Outpatient Mental Health Center), or 10.63.03.09 (Psychiatric Rehabilitation Program) or 10.09.45 (Mental Health Case Management), including the most recent accreditation, licensure, and compliance site visit report, statement of deficiencies, and corrective action plan, as applicable.
- *Appendix 2* – Organizational chart
- *Appendix 3* – Include two letters of support that demonstrate strong collaboration effort

### **XIII. PROPOSAL EVALUATION CRITERIA (see Attachment I)**

### **XIV. SELECTION AND CONTRACT REQUIREMENTS**

The Worcester County Local Behavioral Health Authority (WCLBHA) or its designee shall select the most qualified and responsive applicant through this Request for Proposal (RFP). The selected offeror will be required to enter into a contractual agreement with the Worcester County Local Behavioral Health Authority (WCLBHA) to serve as the mental health Targeted Case Management (TCM) provider for adults in Worcester County. Only those providers selected through this process will be permitted to serve as mental health Targeted Case Management (TCM) providers for adults for Worcester County residents only.

A sample contract packet is available at Worcester County Local Behavioral Health Authority (WCLBHA) for your reference and review. The contents of this Request for Proposal (RFP) and the proposal of the successful offeror will be incorporated by reference into the resulting agreement. Worcester County Local Behavioral Health Authority (WCLBHA) will enter into a contract only with the selected offeror and the selected offeror will be required to comply with, and provide assurance of, certification as to certain contract requirements and provisions.

Selected offers will also be required to receive and maintain approval from the Behavioral Health Administration (BHA). Upon receiving notification of award, providers selected through this Request for Proposal (RFP) process shall contact the BHA Clinical Services Division for Adults and Older Adults for instructions as to the process to apply for the National Provider Identifier (NPI) and the Medical Assistance provider number and to enroll with the Administrative Services Organization (ASO) as a Targeted Case Management (TCM) for Adults provider.

**Attachment I**  
**TARGETED CASE MANAGEMENT SERVICES PROGRAM RATING SHEET**

**Organizational Background (10 points)**

- This section should provide evidence of the organization's history and experience providing one of the eligible mental health services: Mobile Treatment, Outpatient Mental Health Center, Psychiatric Rehabilitation, or at least three years of Mental Health Case Management.
- It should also clearly show the organization's understanding of the requirements under COMAR 10.09.45 and its capacity to operate using a Fee-For-Service reimbursement model.

**Description and Goals of the Mental Health Case Management Program (25 points)**

- The description of the program should show a strong commitment to the goals of Targeted Case Management (TCM).
- The applicant should demonstrate a strong understanding of the requirements listed in the Scope of Service by providing a detailed implementation plan.
- The location of services should be adequate to store case files, support staffing needs, and promote access to case management services.
- It should be clear that the program will avoid known conflicts of interest/ self-referral and respect consumer choice when connecting consumers to other services.

**Program's Organizational Structure and Staffing Plan (20 points)**

- The staffing pattern and organizational chart should demonstrate a strong understanding of the regulations that govern the staffing of Mental Health Case Management services outlined in COMAR 10.09.45.05.
- It should be apparent that qualified staff will be available 24 hours per day, 7 days per week to address the urgent needs of consumers.
- Staff training and supervision should be adequate to support staff who often works offsite and with individuals with diverse needs and backgrounds.

**Effectively Serving the Target Population (25 points)**

- This section should thoroughly explain how the applicant will effectively reach out to, engage, enroll, serve, successfully link, and ultimately discharge the target population, particularly those individuals with multiple, complex needs.
- Emphasis should be given to the partnerships the program either has or will develop for the purposes of generating referrals from and making linkages to these systems.
- This section should clearly articulate a commitment to service delivery that is culturally and linguistically competent and responsive to the diverse communities served. It should also describe how the program will work with people who have limited English proficiency, both within the Mental Health Case Management program and in connecting consumers to culturally and linguistically competent care.

**Program Evaluation and Quality Assurance (15 points)**

- The applicant should show a commitment to providing quality services by describing how quality will be defined and measured on an ongoing basis.

**Implementation Timeline (5 points)**

- The timeline should be reasonable and emphasize the transition of existing consumers of providers not selected by this Request for Proposal (RFP) process.

# **Adult Mental Health Targeted Case Management Providers List**

**Children's Choice**

Attention: Leslie Allen  
1813 Sweet Bay Drive, Suite 1A  
Salisbury, MD 21801

**Lower Shore Clinic, Inc.**

Attention: Dimitrios Cavathas  
505 E. Main St.  
Salisbury, MD 21804

**Eastern Shore Psychological Services**

1113 Healthway Drive  
Salisbury, MD 21804

**Community Behavioral Health**

821 Eastern Shore Dr.  
Salisbury, MD 21804

**Maple Shade Youth and Family Services**

23704 Ocean Gateway  
Mardela Springs, MD 21837

**Worcester County Health Department**

Attention: Kathryn Craige  
6040 Public Landing Road  
Snow Hill, MD 21863

**Worcester County Health Department**

Attention: Eric Gray  
6040 Public Landing Road  
Snow Hill, MD 21863

**Worcester Youth and Family Counseling  
Services**

ATTN: Jennifer Leggour  
124 N. Main Street, Suite C  
Berlin, MD 21811

**Youth Care Center**

ATTN: Shawn Johnson  
3917 Market St.  
Snow Hill, MD 21863

**Wraparound Maryland, Inc**

ATTN: Kim Cook  
314 Civic Avenue  
Salisbury, MD 21804

**Chesapeake Health Care- Mental Health**

1104 Healthway Dr.  
Salisbury, MD 21804



OFFICE OF THE TREASURER

**Worcester County**

GOVERNMENT CENTER

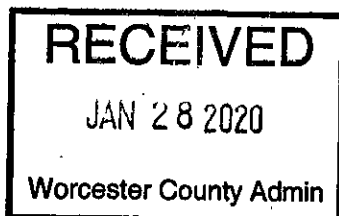
ONE WEST MARKET STREET, ROOM 1105

P.O. Box 248

SNOW HILL, MARYLAND

21863

TEL: 410-632-0686  
FAX: 410-632-3003



5  
PHILLIP G. THOMPSON, CPA  
FINANCE OFFICER

JENNIFER C. SWANTON, CPA  
ASSISTANT FINANCE OFFICER

**TO: Harold L. Higgins, Chief Administrative Officer**  
**FROM: Phillip G. Thompson, Finance Officer**  
**DATE: January 28, 2020**  
**SUBJECT: Wynne Case – County Refunds**

As you may recall, the Wynne case which began almost 15 years ago was centered on the failure of the Comptroller to provide a full credit for income taxes paid to other states. It had been the Comptroller's position that a credit against the state income tax for income taxes paid to another state was allowed, however a credit against the County income tax was not. The case subsequently progressed through various courts until it was heard by the United States Supreme Court in early 2014. A final opinion was released by the court on May 18, 2015 that upheld the prior Court's ruling that Maryland's income tax procedure violated the Commerce Clause.

This verdict resulted in the Comptroller having to pay refunds as well as interest from the Local Income Tax Reserve Account ("Account") which is the source of our ongoing income tax distributions. Once the refunds were fully disbursed by the Comptroller each local government would then be required to reimburse the Account for its share of the related expenses. The distributions were completed as of December 31, 2018 and a schedule from the Comptroller showing Worcester County's share of the claims by tax year (attached) indicates a total due of \$699,928. The General Assembly has given us the option to pay this amount in full (one time) or have the amount deducted from our Local Income Tax distributions in 20 equal installments of \$34,996.40 over the next 6 fiscal years. I would recommend that we take advantage of the interest free installment option and have the 20 payments totaling \$34,966.40 taken from our regular income tax distributions rather than a one-time payment of \$699,928. Using this approach the most impacted years will be fiscal years 2022 -2025 with reductions in income tax distributions totaling \$139,866 (4 installments) each year.

Should you have any questions, or require additional data, please do not hesitate to contact me.

Cc: Kathy Whited – Budget Officer



**Comptroller of Maryland  
Revenue Administration Division**

**Jurisdiction's Share of Wynne Credit  
As of December 2018**

**Worcester County**

<u>Tax Year</u>	<u>Number of Returns</u>	<u>Refund</u>	<u>Interest</u>	<u>Total</u>
2007	3	\$ 39,647	\$ 4,251	\$ 43,898
2008	5	23,004	2,614	25,618
2009	7	12,893	1,277	14,170
2010	5	8,416	464	8,880
2011	11	26,556	743	27,299
2012	146	203,457	2,219	205,676
2013	165	165,398	1,731	167,129
2014	208	206,287	971	207,258
	<u>550</u>	<u>\$ 685,658</u>	<u>\$ 14,270</u>	<u>\$ 699,928</u>

Deduction beginning in May 2021 Distribution (1/20 of Total)

\$ 34,996.40




6

**Worcester County**  
Department of Environmental Programs

Memorandum

**To:** Harold L. Higgins, Chief Administrative Officer

**From:** Robert J. Mitchell, LEHS   
Director, Environmental Programs

**Subject:** Rural Legacy FY 20 Grant Agreement  
Coastal Bays Rural Legacy Area

**Date:** 1/27/20

Attached you will find a memo for the grant agreement from Katherine Munson, of my staff with the recommendations that were approved by the State Board of Public Works. The Board approved:

1. \$250,382.00 for the Coastal Bays Rural Legacy Area (RLA).

Rural Legacy pays landowners for permanent conservation easements on their properties. The program is funded through a combination of state Program Open Space and general obligation bonds from the state's capital budget. There are two (2) approved legacy areas in Worcester County – the Dividing Creek RLA (approved 2008) and the Coastal Bays RLA (approved 1999)

These agreements were reviewed by the County Attorney. The signature pages are marked for endorsement and should be signed by Commissioner Mitrecic and the County Attorney. They will be used to purchase 1-2 conservation easements for the Coastal Bays RLA.

We received \$250,382.00 in local funding from our original request of \$1,050,000, while competing against the rest of the state for grants from this program.

If you have any questions or need any additional information please let me know. Both Ms. Munson and I will be available to discuss with you and the County Commissioners at your convenience.

Attachments

cc: Roscoe Leslie  
Katherine Munson

1a



DEPARTMENT OF  
ENVIRONMENTAL PROGRAMS

**Worcester County**

GOVERNMENT CENTER  
ONE WEST MARKET STREET, ROOM 1306  
SNOW HILL, MARYLAND 21863  
TEL: 410.632.1220 / FAX: 410.632.2012

AGRICULTURAL PRESERVATION  
CONSERVATION PROGRAM  
WATER & SEWER PLANNING  
SHORELINE CONSTRUCTION

WELL & SEPTIC  
NATURAL RESOURCES  
PLUMBING & GAS  
COMMUNITY HYGIENE

## Memorandum

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**TO:** Robert Mitchell, Director

**FROM:** Katherine Munson, Planner V *KM*

**SUBJECT:** FY20 Coastal Bays Rural Legacy Area Grant Agreement

**DATE:** January 27, 2020

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Attached please find the FY20 Coastal Bays Rural Legacy Area (CBRLA) grant agreement for commissioner review and signature. It consists of two copies of the agreement that must be signed where indicated, color map of the CBRLA showing the properties protected to date and the priority properties for easement acquisition (Attachment A), general conditions (Attachment B), priority property list (Attachment C).

The first page of the agreement will be dated by DNR following execution by the Rural Legacy Board.

The grant agreement has been reviewed by Roscoe Leslie.

Worcester County requested \$1,050,000.00 and was awarded \$250,382.00.

For FY20, \$18,852,009 million was available for Rural Legacy grants, which was divided among eighteen (18) Rural Legacy Areas throughout the state.

The Dividing Creek RLA was not awarded FY20 funds.

The grant funding will be used to purchase 1-2 conservation easements in Worcester County from willing landowners. The funding is provided not only for the purchase cost, but also for administrative and other costs (survey, title, county administrative costs, etc.).

Please contact me with any questions.

cc: David Bradford, Administrator, Natural Resources  
Attachments

**RURAL LEGACY GRANT AGREEMENT  
SPONSOR: LOCAL GOVERNMENT**

**THIS GRANT AGREEMENT** ("Agreement") is made this \_\_\_\_ day of \_\_\_\_, 2020 by and between the STATE OF MARYLAND, acting through the RURAL LEGACY BOARD ("RLB"), c/o Rural Legacy Program, Department of Natural Resources, 580 Taylor Avenue, Annapolis, Maryland 21401 and COUNTY COMMISSIONERS OF WORCESTER COUNTY, MARYLAND, a local government, Department of Environmental Programs, 1 West Market Street, #1306, Worcester County Government Center, Snow Hill, Maryland 21863 (hereinafter sometimes referred to either as the "Sponsor" or the "Local Government").

**RECITALS**

WHEREAS, the State of Maryland, pursuant to Natural Resources Article § 5-9A-01, et. seq., has established the Rural Legacy Program ("Program") to enhance natural resource, agricultural, forestry, and environmental protection and the Program provides funds through grant assistance to local governments and land trusts to purchase interests in real property from willing sellers, including fee estates, easements and other interests in real property for the preservation of land in key areas of Maryland;

WHEREAS, the Sponsor is a local government, meaning one of Maryland's 23 counties or one of Maryland's municipal governments;

WHEREAS, the Sponsor represents a Rural Legacy Area, known as the Coastal Bays Rural Legacy Area shown on the map set forth on Attachment A ("Rural Legacy Area");

WHEREAS, the RLB has designated the Rural Legacy Area submitted in the Sponsor's application as originally submitted or as amended;

WHEREAS, the RLB has agreed to award the Sponsor a grant in an amount not to exceed the Total Grant Amount pursuant to the terms and conditions of this Agreement to be used for the purchase of certain interests in real property for the preservation of land in the Rural Legacy Area, and for approved Project Costs pursuant to Project Agreements, all as more particularly described herein;

WHEREAS, the RLB's Rural Legacy Area designation, Rural Legacy Plan acceptance, Grant award and authorization to execute this Agreement were subject to approval by the Maryland State Board of Public Works ("BPW") and such approvals have been given by the BPW on January 8, 2020; and

WHEREAS, the Sponsor shall enter into Project Agreements for Eligible Properties, which the Sponsor may acquire, which Agreements shall specify the Project Costs that the Sponsor may request for acquisition of Eligible Properties, subject to the approval of the RLB and the BPW.

NOW, THEREFORE, in consideration of mutual covenants, terms and conditions of this Agreement, the parties agree as follows:

Section 1.     Definitions.

Acquisition Activities is defined in Section 4.1. of this Agreement.

Annual Report is defined in Section 8.2. of this Agreement.

BPW is defined in the Recitals Section of this Agreement.

Contract is defined in Section 4.2.5 of this Agreement.

Easement is defined in Section 4.2.2. of this Agreement.

Easement Form is defined in Section 4.2.2. of this Agreement.

Effective Date is defined in Section 12.12. of this Agreement.

Eligible Properties is defined in Section 3.1. of this Agreement.

Grant Period is defined in Section 2.2. of this Agreement.

Law is defined in Section 3.7. of this Agreement.

Mortgage(s) is defined in Section 4.2.6. of this Agreement.

Permitted Real Estate Interests is defined in Section 3.1. of this Agreement.

Program is defined in the Recitals Section of this Agreement.

Project Agreement is defined in Section 3.4. of this Agreement.

Project Costs is defined in Section 3.4. of this Agreement.

Rural Legacy Area is defined in the Recitals Section of this Agreement.

Rural Legacy Manual is defined in Section 3.7. of this Agreement.

SLCO is defined as a State Land Conservation Organization being “the Maryland Agricultural Land Preservation Foundation, the Maryland Environmental Trust, Maryland Department of Natural Resources, or another State organization approved by the RLB.”

Subordination Agreement is defined in Section 4.2.6. of this Agreement.

Title Holders are defined in Section 4.2.3. of this Agreement.

Total Grant Amount is defined in Section 2.1. of this Agreement.

## Section 2. Grant.

2.1. Amount of Grant. Subject to the terms and conditions of this Agreement, the RLB hereby agrees to award a grant to the Sponsor in an amount not to exceed Two Hundred Fifty Thousand Three Hundred Eighty Two Dollars (\$250,382) (the "Total Grant Amount") to be used solely for payment of approved Project Costs in connection with acquisition of Permitted Real Estate Interests in Eligible Properties. In accordance with the terms and conditions of this Agreement and each Project Agreement, and during the Grant Period as defined below, the RLB shall disburse to the Sponsor that portion of the Total Grant Amount which equals approved Project Costs for acquisition of Eligible Properties, provided however, that such disbursements shall cease upon the earlier to occur of (a) the date on which the sum total of all disbursements hereunder equals the Total Grant Amount, or (b) the expiration of the Grant Period.

2.2. Grant Period. The "Grant Period" shall mean that period commencing upon the Effective Date of this Agreement and ending on the date which is twelve (12) calendar months from the Effective Date, unless the Grant Period is extended by the RLB in its sole discretion. In the event the ending date falls on a legal holiday or non-business day, the ending date shall be the next immediately succeeding day which is not a legal holiday or a non-business day.

2.3. General Conditions. Any general conditions to this Agreement are set forth in Attachment B attached hereto.

2.4. Sponsor Information, Easement Form and Eligible Properties. Sponsor and other information are set forth in Attachment C attached hereto. Some of the information on Attachment C is also specified in another part of this Agreement or the other Attachments to this Agreement, and if there are any conflicts between Attachment C and any of the terms of this Agreement or the other Attachments to this Agreement, the terms of this Agreement and the other Attachments shall govern.

## Section 3. Sponsor's Performance.

3.1. Property Acquisitions. A Sponsor may acquire Permitted Real Estate Interests in Eligible Properties. "Permitted Real Estate Interests" means fee simple estate interests or conservation easement interests, or other real estate interests allowed by the Law. "Eligible Properties" means both those properties which the Sponsor has identified and listed in Attachment C. In the event that Sponsor requests (a) additional properties to be placed on Attachment C or (b) a change of the Rural Legacy Area boundary, Sponsor shall submit a written

request for approval to the Rural Legacy Program and shall not begin the acquisition process for the property until such approval has been granted.

3.2. Submission of Easement Valuation Methodology. Within thirty (30) days of execution of this Agreement, the Sponsor shall submit to the RLB its Easement valuation methodology. The methodology shall reflect the agricultural, forestry, and natural resource qualities the Easement is designed to protect; reflect the fair market values of properties in the Rural Legacy Area; and relate to the range of easement values paid by the Maryland Agricultural Land Preservation Foundation and other easement purchasing programs. Upon approval by the RLB, the Sponsor may use the approved methodology to acquire conservation easements as Permitted Real Estate Interests.

3.3. Appraisals. If the Permitted Real Estate Interest to be acquired is an Easement, the Sponsor shall use its approved easement valuation methodology to appraise the value of the Easement. If the Sponsor does not have an approved easement valuation methodology, or if the Permitted Real Estate Interest is not an Easement, the Sponsor shall obtain two independent appraisals of the value of the property interest to be acquired and shall otherwise comply with the appraisal requirements set forth in the Rural Legacy Manual. The easement valuation methodology and appraisals shall be subject to the approval of the RLB or designee. A Sponsor who has an approved Easement valuation methodology shall not use appraisals unless specifically authorized by the Rural Legacy Program.

3.4. Project Agreement. If the Sponsor and a property owner of an Eligible Property reach agreement on the terms of an acquisition, the Sponsor shall prepare a Project Agreement, substantially in the form required by the RLB (a copy can be obtained from the Rural Legacy staff) ("Project Agreement"). The Project Agreement shall include a copy of the Contract (as defined in 4.2.5) for the Eligible Property, and, as applicable, the proposed form of the Easement or the proposed form of the Deed and other supporting documents. The Project Agreement shall specify the amount of total permissible costs, including direct (contract) costs, incidental costs, administrative costs, and easement monitoring costs ("Project Costs") which the Sponsor shall receive from the Total Grant Amount following Sponsor's satisfaction of the terms of this Agreement.

3.5. Rural Legacy Program Review, Approval. A Sponsor shall submit the Project Agreement to the Rural Legacy Program for review. The Rural Legacy Program shall review the Project Agreement for compliance with the terms of this Agreement and the Law. Project Agreements meeting all Program requirements will be submitted by the Rural Legacy Program to the BPW for approval. Upon BPW approval of the Project Agreement, the Sponsor shall make every effort to acquire the Eligible Property within forty-five (45) days.

3.6. Reimbursement. A Sponsor who acquires an Eligible Property may apply to the RLB for reimbursement of Project Costs in accordance with the Project Agreement and Section 6 of this Agreement.



3.7. Compliance. Sponsor agrees to comply with the terms and conditions of this Agreement, the Rural Legacy Area, its accompanying application, and each Project Agreement. Sponsor acknowledges and agrees that this Grant Agreement is governed by the terms and provisions of Subtitle 9A of the Natural Resources Article which established the Program, the Program's Regulations, and the Rural Legacy Manual and Application Procedures dated December 2001 (the "Rural Legacy Manual"), as they may be amended from time to time, and as sometimes referred to herein collectively as the "Law."

#### Section 4. Conditions for Acquisition of Permitted Real Estate Interests.

4.1. Acquisition Activities. As set forth in the Law and in this Agreement, the RLB has the right to approve all activities in connection with acquisition of Permitted Real Estate Interests in Eligible Properties ("Acquisition Activities"). The RLB or its designee has the right to make comments upon, require revisions to, and approve all Acquisition Activities whether or not specifically enumerated below. In addition, in the event a SLCO will hold title to a Permitted Real Estate Interest, the SLCO shall have the right to make comments upon, require revisions to and approve all Acquisition Activities, whether or not specifically enumerated below. Any other Title Holders of a Permitted Real Estate Interest shall have the right to make comments upon, require revisions to and approve all Acquisition Activities, whether or not specifically enumerated below. The Sponsor shall contact any SLCO and any other Title Holders directly for any comments, revisions or requirements that they may have.

#### 4.2. Acquisition of a Fee Estate or a Conservation Easement.

4.2.1. Form of Deed. If the Permitted Real Estate Interest is a fee simple estate interest, the Sponsor shall submit the form of the proposed special warranty deed (the "Deed") to the RLB or its designee, any SLCO and any Title Holders for approval. The Deed shall be drafted to provide that one hundred percent (100%) of the fee simple estate interest shall be held by the Title Holders as the Grantees in the Deed. At settlement, the Deed shall be duly executed and recorded among the land records where the Eligible Property is located.

4.2.2. Easement Form. If the Permitted Real Estate Interest is a conservation easement interest, the Sponsor shall use either the Rural Legacy Program Sample Easement and Optional Provisions, available from the Rural Legacy staff, or the Sponsor shall use the Sponsor's Easement Form as approved by the Rural Legacy staff and the Office of the Attorney General. The form of easement chosen is also indicated on Attachment C (the "Easement Form"). Any changes to the Easement Form shall be approved by the RLB or its designee, the SLCO, if any, and any Title Holder. As used herein, "Easement" shall mean the final approved Easement Form. At settlement, the Easement shall be duly executed and recorded among the land records where the Eligible Property is located.

4.2.3. Title Holders. The parties acquiring any fee simple estate interest or any Easement interests acquired under this Grant Agreement shall be specified in the Project Agreement as the "Title Holders".

4.2.4. Property Description. All Eligible Properties proposed for acquisition under the Rural Legacy Program shall have a metes and bounds description or a reference to lots on a duly recorded plat and/or a survey with a metes and bounds description, all as approved by the RLB or its designee, the SLCO and any Title Holder. Any Title Holder, including but not limited to any SLCO, shall also have the right to approve the metes and bounds description or lot reference and/or the survey with a metes and bounds description, and, in addition to the foregoing requirements, may have requirements on the adequacy of the metes and bounds description of or lot reference for the Eligible Property and may require a survey in form and content acceptable to such Title Holder and to the title insurance company.

4.2.5. Contract. The Sponsor shall use option contract or contract of sale forms (collectively, "Contract") approved by the RLB or its designee. The Contract shall contain conditions which (a) shall permit the Title Holders to be the Grantee on the Deed or Easement in addition to the purchasers under the Contract, even if such Title Holders are not listed as purchasers under the Contract, (b) make the Contract contingent upon the approval by the RLB or its designee, any Title Holders, any SLCO, and the BPW, unless the Sponsor is willing to run the risk that the Sponsor may settle and the Contract might not be approved, and (c) in the case of an Easement, make the Contract contingent upon the receipt of fully executed Subordination Agreement(s). The Contract is subject to BPW approval.

4.2.6. Subordination to Easement. All mortgages, deeds of trust and any other liens or encumbrances, (except for future taxes, charges or assessments, not yet due and payable), with respect to the repayment of a debt against the Eligible Property (collectively, the "Mortgages") must be fully subordinated to the Easement. Sponsor shall provide a copy of each proposed subordination agreement ("Subordination Agreement") to the RLB along with the Project Agreement. The RLB or its designee, any Title Holder, and the SLCO, if any, shall have the right to approve the form of the Subordination Agreement, prior to its execution, and the recording order of the Easement and the Subordination Agreements.

4.2.7. Title Insurance. The Sponsor shall obtain title insurance for the Eligible Property in the form of an Owner's Policy from a title insurance company licensed to do business in the State of Maryland in the amount of the purchase price of the Permitted Real Estate Interest in the Eligible Property. The title insurance policy shall not contain exceptions to title which (a) would defeat the purpose of the Program and any Easement or Deed placed upon the Eligible Property as required by the Program, (b) create a remainder, reversion, or condition which could cause forfeiture or reversion of title, (c) require the payment of money by any SLCO, unless such exception is approved by any SLCO, (d) list an unsubordinated mortgage, deed of trust, judgment, lien or other encumbrance, contract or purchase option, which would, if foreclosed or enforced, take priority over and eliminate the interest of the Sponsor, any SLCO and any Title Holders in the Easement in the Eligible Property, (e) provide for the lien of unpaid taxes or show any taxes or any other charges or assessments as unpaid, unless such taxes, charges or assessments are not yet due and payable, (f) are the preprinted standard exceptions (unless any preprinted exception would require a survey acceptable to the title company in order

to remove such exception and a decision has been made not to obtain such a survey pursuant to Section 4.2.4.), or (g) any exception unacceptable to any SLCO or any Title Holder.

4.2.8. Evidence of Authority. For any Deed, Easement and Contract, executed by (a) the Sponsor and any Title Holder with (b) any entity conveying such interest to the Sponsor and any Title Holder, the Sponsor shall ensure that any such entity is a validly existing legal entity, in good standing (if applicable for that particular type of entity), has the authority to enter into the transaction and into the respective documents evidencing the transaction, and the persons signing on its behalf hold the offices or positions described and are duly authorized to do so. The Sponsor and Rural Legacy Board or designee shall review any organizational documents of the entity attached as well as a Good Standing Certificate, if issued for the particular type of entity by the State Department of Assessments and Taxation.

4.2.9. Environmental Assessment. The Contract shall provide the Sponsor, the SLCO, if any, and any Title Holder with the right to conduct an environmental site assessment of the Eligible Property. The Sponsor and any Title Holder shall, at a minimum, complete or cause to have completed an environmental site assessment of the Eligible Property, in form and content acceptable to the Sponsor, any Title Holder, Rural Legacy Board or designee. The environmental site assessment form prepared as a result of such environmental site assessment shall be attached to the Project Agreement, documenting at a minimum the physical inspection of the Eligible Property and the findings from an inquiry into the historical uses of the Eligible Property. If any environmental hazard is found or suspected, it is to be listed in the Project Agreement with a proposed plan for addressing such environmental hazards. If a SLCO is to be the Title Holder, the SLCO may have requirements on the form of the environmental site assessment and the proposal for handling any suspected or found environmental hazards.

4.2.10. Easement on Fee Simple Property. Either simultaneously with its acquisition by the Sponsor and any Title Holders or before any reimbursement for such acquisition shall be made hereunder, an Eligible Property which is a fee simple estate interest, shall be encumbered with a conservation easement held by a SLCO which shall be duly executed and recorded among the land records where the Eligible Property is located following the recordation of the Deed. The Easement shall be in form and content acceptable to the RLB, any Title Holder and the SLCO, if any.

4.3. Local Government as Title Holder. Notwithstanding the foregoing and unless the SLCO indicates in writing to the RLB to the contrary at the time the SLCO agrees to be a Title Holder, if a Local Government is an Easement or fee simple estate Title Holder, then the Local Government shall approve matters of title, metes and bounds description, survey and environmental assessment, and the attorney for such Local Government shall sign the Deed or Easement as prepared by or under the supervision of an attorney and as to form and legal sufficiency, and the approval of the Local Government shall be evidenced by the duly authorized signatures on the Deed or the Easement of the Local Government and the written assurance of the Local Government to the RLB that the Local Government has duly investigated matters of title, metes and bounds description, survey and environmental assessment, does not believe the

information revealed in the title, metes and bounds description, survey and environmental assessment would defeat the purpose of the Program, is satisfied with and willing to assume any risks revealed therefrom.

4.4. Other Permitted Real Estate Interests. If the Permitted Real Estate Interest is not an Easement or a fee simple estate interest, the requirements for this Section 4 will be set forth in an Addendum to this Agreement.

Section 5. Disposal of Fee Simple Property.

Sponsor may dispose of the Sponsor's fee simple estate interest in an Eligible Property acquired with all or a portion of the Total Grant Amount under this Agreement pursuant to the Rural Legacy Manual, subject to approval by and in accordance with conditions imposed by the RLB, including but not limited to special requirements regarding bond monies as set forth in the Rural Legacy Manual, the Law and other federal and state laws. A conservation easement approved by the RLB or its designee shall be placed on the property before transfer to another entity. Pursuant to the Rural Legacy Manual, funds derived from the disposal of an Eligible Property during the Grant Period may be used by Sponsor for other acquisitions of Eligible Property or Properties provided such acquisitions comply with all the requirements of this Agreement for acquisition of Eligible Properties.

Section 6. Reimbursement of Costs.

6.1. Overview. Each Project Agreement for each Eligible Property represents a separate transaction for purposes of determining the amount of the Total Grant Amount which shall be allocated as Project Costs for that particular Eligible Property. Project Costs may include direct (contract) cost, incidental costs, administrative costs, and easement monitoring costs as provided in the Law. That portion of the Total Grant Amount which is used to reimburse a Sponsor for direct costs incurred in the acquisition of an Eligible Property shall not, when combined with all other funds used by or available to the Sponsor for such acquisition, exceed one hundred percent (100%) of the cost of acquiring the Eligible Property.

6.2. Retroactivity. Retroactive costs prior to the Grant Period are not allowed.

6.3. Approved Project Costs. The requirements for and procedures governing payment of Approved Project Costs are set forth in the Rural Legacy Manual.

6.4. Program Compliance Costs. Depending on the fund source (i.e. whether bond funds are used to fund the Grant), a portion of the Grant, not to exceed one and one-half percent (1 ½ %) of each Easement purchase cost, may be used to pay for program compliance costs for monitoring Easements. To be eligible, Sponsors must document that payments for monitoring costs will be placed in an endowment or other special account to be made available only to the Grantee for the purpose of monitoring the specific Easement acquired with Rural Legacy funds. Fees charged for program compliance for Easement monitoring will be invested

in a long-term, managed investment account, the principal of which may not be withdrawn or used without the approval of the RLB. Additional provisions regarding program compliance costs are set forth in the Rural Legacy Manual.

6.5. Advance Payment. The Sponsor should, as a general rule, submit requests for reimbursement for administrative and incidental costs to the Rural Legacy Program. Under special conditions approved by the Board in this Grant Agreement, for Sponsors that may be unable to initiate acquisition efforts without pre-payment of certain administrative or planning costs, a Sponsor may request a portion of their allowed administrative costs in advance. This advance payment shall be deducted from the allowable three percent (3%) of the Total Grant Amount which is allowable for administrative costs. A Sponsor may also request an advance payment of funds to cover a portion or all of the anticipated direct costs of an acquisition itemized in a Project Agreement and approved by the RLB and the BPW, to be available for payment at settlement.

6.6. Documentation of Expenditures. Each expenditure submitted for payment or reimbursement consideration shall be justified by providing the following information to the Rural Legacy Program: copy of the recorded deed, copy of final title policy, copy of settlement sheet, copies of invoices for any costs not shown on the settlement sheet, and justification of administrative costs. The Sponsor shall maintain satisfactory financial accounts, documents, and records, and shall make them available to staff of the RLB for auditing at reasonable times. Such accounts, documents and records shall be retained by the Sponsor for three (3) years following project termination.

#### Section 7. Stewardship and Monitoring for Program Compliance.

The Sponsor shall establish an Easement stewardship program based upon national standards and practices and involving Easement inspections at least every three (3) years. The Sponsor will submit the program to the RLB for review with the annual report required by Section 8.2.

#### Section 8. Reporting.

##### 8.1. INTENTIONALLY DELETED.

8.2. Annual Report. Sponsor shall provide an annual report of activities to the RLB in a format provided by the RLB (the "Annual Report"). The Annual Report shall be due thirty (30) days after the end of the State fiscal year.

Section 9. Indemnification. The Sponsor shall, to the fullest extent permitted by law, indemnify, save harmless and defend the State of Maryland and all of its representatives from all suits, actions, or claims of any character, brought on account of any injuries or damage sustained by any person or property as a result of the Sponsor's activities, including the activities of its employees, agents, representatives or subcontractors, in connection with its performance

under this Agreement. The Sponsor's indemnification of the State of Maryland and all of its representatives under this Section is subject to the availability of funds appropriated by Charles County, Maryland for such purpose. The County Commissioners of Charles County, Maryland hereby agrees to use his best efforts to include a request in the Annual Budget and Appropriations Ordinance to appropriate funds in the event there is an indemnification cost to the Sponsor under this Section.

Section 10. Sponsor's Failure to Perform; Remedies.

If the Sponsor fails to perform its obligations under this Agreement in whole or in part, the RLB or the State of Maryland may exercise any or all of the remedies set forth below:

- A. Withhold payment of funds under this Agreement until the Sponsor performs its obligations after notice is provided to the Sponsor of the violation of this Agreement and opportunity is provided for compliance satisfactory to the Board;
- B. Perform the Sponsor's obligations, including but not limited to, maintaining, operating or repairing the Eligible Property to protect it from further damage, using funds available under this Agreement;
- C. Collect damages from the Sponsor for the costs of performing the Sponsor's obligations, after notice is provided to the Sponsor of the violation of this Agreement and opportunity is provided for compliance satisfactory to the Board;
- D. Terminate the Agreement in whole or in part;
- E. Withhold approval of any grant request submitted by the Sponsor to the RLB under this Agreement;
- F. Debar the Sponsor from applying for future Program funds; and
- G. Initiate legal action to enforce the terms of this Agreement, the Easement and/ or exercise any other right or remedy under the Law or available at law or in equity.

Section 11. Notices. Any notice provided hereunder shall be in writing and shall be deemed to have been received: (a) on the date of delivery, if given by hand delivery and signed for by the recipient party, or (b) on the next business day following delivery to an overnight delivery or other messenger service, if given by an overnight delivery or other messenger delivery service and signed for or refused by the recipient party, or (c) on the date of actual receipt of delivery or refusal of delivery or return by the United States mails as undeliverable at the address shown, if given by certified mail in the United States mails, postage prepaid, return receipt requested. Any notice provided hereunder shall be provided to the addresses shown on Page One of this Agreement or to such other address in the United States as the party changing its address may designate from time to time by notice to the other party.

Section 12. Miscellaneous.

12.1. Assignment. This Agreement shall inure to the benefit of, and be binding upon, the parties hereto and their respective successors and assigns, including by way of privity of estate and contract, provided however that nothing herein shall be construed to mean that the Sponsor has the right to assign this Agreement or all or any portion of the Total Grant Amount hereunder. Nothing in this Agreement, expressed or implied, is intended to confer upon or against any other person, corporation or government unit, any right or remedy under or by reason of this Agreement.

12.2. Complete Understanding. This Agreement and all attachments incorporated herein represent the complete understanding between the parties hereto and supersede all prior negotiations, representations, statements and agreements.

12.3. Amendment. This Agreement may be amended by an agreement in writing between the Sponsor and the RLB, provided that approval of the BPW shall be required for any amendment to increase the Total Grant Amount.

12.4. Waiver. No party shall be deemed to have waived the exercise of any right which it holds hereunder unless such waiver is made expressly and in writing.

12.5. Applicable Law. This Agreement shall be given effect and construed by application of Maryland law, and any action or proceeding arising hereunder shall be brought in the courts of Maryland.

12.6. Exhibits. Each writing or plat referred to herein as being attached as an attachment is hereby made a part of this Agreement.

12.7. Disclaimer of partnership status. Nothing in the provisions of this Agreement shall be deemed in any way to create between the parties hereto any relationship of partnership, joint venture or association, and the parties hereto hereby disclaim the existence of any such relationship.

12.8. Nondiscrimination. Sponsor agrees not to discriminate against any employee, applicant for employment, or other person because of sex, race, age, creed, color, religious affiliation, mental or physical handicap, national origin, ancestry or marital status and to comply with the terms, intent and provisions of Title VII of the Civil Rights Act of 1964 P.L. 88-354 (1964) and its amendments, Article 49B Sections 14 to 18 (Discrimination in Employment) of the Annotated Code of Maryland (1994 Replacement Volume and its amendments), and the Americans with Disabilities Act of 1990, P.L. 101-336 and its amendments, and with all local, State and federal laws now or hereinafter enacted to effectuate the goals of the aforesaid statutes.



12.9. INTENTIONALLY DELETED.

12.10. No Contingent Fees. Sponsor warrants that it has not employed or retained any person, partnership, corporation or other entity, other than a bona fide employee or agent working for them, to solicit or secure this Agreement, and that it has not paid or agreed to pay any person, partnership, corporation, or other entity, other than a bona fide employee or agent, any fee or any other consideration contingent on the making of this Agreement.

12.11. INTENTIONALLY DELETED.

12.12. Effective Date. This Agreement shall be effective upon the execution of this Agreement by all of the parties to this Agreement (the "Effective Date").

12.13. Captions. Caption and headings in this Agreement are for ease of reference only and shall not be deemed a part of or have any meaning in the interpretation of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date entered below under their respective signatures.

WITNESS/ATTEST:

COUNTY COMMISSIONERS OF WORCESTER  
COUNTY, MARYLAND:

\_\_\_\_\_  
(Signature)

BY: \_\_\_\_\_(SEAL)

Joseph M. Mitrecic  
President

\_\_\_\_\_  
(Print Name)

DATE:

\_\_\_\_\_  
(Title)

WITNESS:

STATE OF MARYLAND  
RURAL LEGACY BOARD:

\_\_\_\_\_  
(Signature)

BY: \_\_\_\_\_(SEAL)

Jeannie Haddaway-Riccio  
Chair, Rural Legacy Board

\_\_\_\_\_  
(Print Name)

DATE: \_\_\_\_\_

Approved as to form and legal sufficiency  
this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

\_\_\_\_\_  
Assistant Attorney General

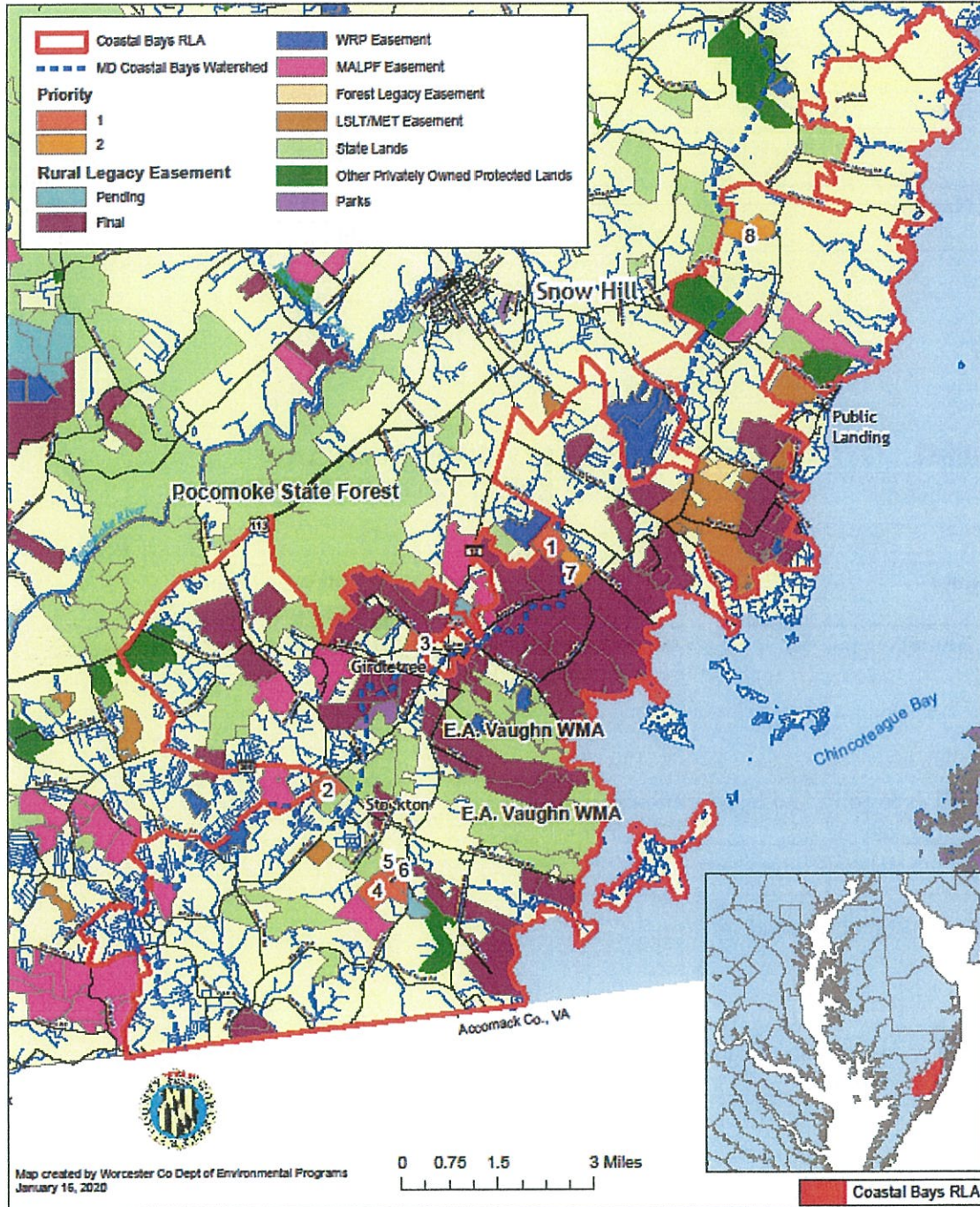
Approved as to form and legal sufficiency  
this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

\_\_\_\_\_  
City Solicitor / County Attorney

# ATTACHMENT A

Page 1 of 1

## Attachment A: Coastal Bays Rural Legacy Area, FY20 Grant Agreement



**ATTACHMENT B**  
**GENERAL CONDITION FOR RURAL LEGACY GRANT AGREEMENT**  
**SECTION 2.3 OF THIS GRANT AGREEMENT**  
**Page 1 of 3**

The Sponsor shall comply with the following General Conditions of this Grant Agreement:

1. Point System and Ranking Any point system used by the Sponsor to rank and value easement acquisitions shall:
  - A. Incorporate natural and cultural features and water quality protection to the degree these values exist in the Rural Legacy Area and are a priority objective of the Rural Legacy Plan.
  - B. Give priority to properties that alone, or in conjunction with other properties, protect contiguous large blocks of agricultural, forestry, natural or cultural resources.
  - C. Be submitted to the Rural Legacy Program for approval prior to, or as part of the submission of easement or fee request.
2. Easement Donation
  - A. The Sponsor shall continue or initiate efforts to obtain donations of easements in addition to easement purchases by providing information on the tax and related benefits of easement donations to property owners in the Rural Legacy Plan Area and by identifying and soliciting easements in those parts of the Rural Legacy Area where landowners are more likely to donate rather than sell easements.
  - B. The Sponsor shall include an evaluation on efforts made and successes achieved in soliciting easement donations and the effect of Rural Legacy Program easement purchases on property owner willingness to donate rather than sell easements as a part of the Annual Report to the Rural Legacy Board required under Section 8.2 of this Agreement.
3. Conservation Reserve Enhancement Program
  - A. The Sponsor shall endeavor to enroll all easement sellers and donors into the Conservation Reserve Enhancement Program ("CREP"), including perpetual CREP restrictions as part of Rural Legacy Program easements.
  - B. The Sponsor shall include an evaluation of efforts made and successes achieved in incorporating CREP into easement agreements as a part of the Annual Report to the RLB required under Section 8.2 of this Agreement.

**ATTACHMENT B**  
**GENERAL CONDITION FOR RURAL LEGACY GRANT AGREEMENT**  
**SECTION 2.3 OF THIS GRANT AGREEMENT**

**Page 2 of 3**

**4. Stewardship**

- A. The Sponsor shall establish or continue a stewardship program for easements that involves easement inspections on at least three-year intervals, based on national standards and practices for easement programs.

**5. Supporting Activities.** In the Annual Report required under section 8.2 of this Grant Agreement, Sponsor shall describe how local planning, growth management tools, land use authority, and other supporting programs will be used to prevent incompatible development of private land until it can be permanently protected, and how these tools will protect the character of the Rural Legacy area for properties that may not be permanently protected. With respect to 1) existing programs and their strengths and weaknesses; 2) new or improved programs since the last Rural Legacy submission and; 3) programs and actions under study (with an estimate of their likelihood for enactment and implementation) Sponsor shall explain concisely how each of the following, as applicable, supports Rural Legacy objectives: protective zoning, TDR programs, PDR programs, gift easements, natural resource/environmental protection measures, support for rural economic activities and any other programs that contribute to meeting the Rural Legacy Area objectives. Sponsor shall also include in the Annual Report information on any plans and commitments to focus the use of other easement acquisition funds and shall provide data (tabular data or maps as appropriate) on the quantity, location, lot sizes and general nature of subdivision activity in the Rural Legacy Area.

**6. Property List.** This Grant Agreement represents a grant for the acquisition of fee or easement interest for the properties identified in Attachment C of this Grant Agreement. All of the properties listed in Attachment C of this Grant Agreement shall be within the Rural Legacy Area as approved by the Rural Legacy Board. The Sponsor shall acquire these property interests based on the priority levels represented in Attachment C and every effort shall be made to acquire the property interests identified as priority one prior to initiating acquisition of property interests in other priority levels. In cases where a change in priority level is necessary for any property, Sponsor shall notify Rural Legacy Program staff in writing of the change, with a brief explanation of the reason for the change. The change shall be reflected in the quarterly and annual reports required under section 8.1 and 8.2 of this Grant Agreement.

**7. Protection of Rural Legacy Area.** The Sponsor shall include in the annual report to the RLB, which is required under Section 8.2 of this Grant Agreement, a section which discusses local planning, zoning, and related resource protection programs and actions to protect the Rural Legacy Area and surrounding area from development that threatens the values of, and undermines the investment in, the Rural Legacy Area. The section of the

**ATTACHMENT B**  
**GENERAL CONDITION FOR RURAL LEGACY GRANT AGREEMENT**  
**SECTION 2.3 OF THIS GRANT AGREEMENT**

**Page 3 of 3**

Annual report, Protection of Rural Legacy Area, shall summarize strengths and weaknesses of existing programs and describe any new or improved mechanisms that will protect the State and local investment in land, resources, and the resource-based economy in and around the Rural Legacy Area and contribute to the protection of land in the Rural Legacy Area. Actions and programs such as protective zoning, Transferable Development Right's and Purchased Development Rights's, riparian buffer ordinances, public facility policies, and tax credits should be addressed.

8. Execution of Grant Agreement. The Grant Agreement shall be executed by Sponsor and delivered to the Department of Natural Resources for execution by the Chairman of the Rural Legacy Board within ninety (90) days of the Sponsors receipt by registered mail of the Grant Agreement.
9. Period of Grant Agreement. The period of this Grant Agreement shall commence upon execution of this Agreement by all parties, the Effective Date, and shall end on the date which is twelve (12) calendar months from the Effective Date as specified in sections 2.2 and 12.12 of this Grant Agreement.
10. Acquisition Policies. Easement acquisitions, including but not limited to residential density, shall be consistent with policies set forth by the Rural Legacy Board. Sponsor shall submit an easement acquisition policy and attendant easement valuation system to be approved by the Rural Legacy Board prior to submission of any request for payment or project agreement.
11. Program Compliance. Sponsor shall provide evidence that an account for program compliance funds has been established as required in section 6.4 of this Grant Agreement prior to any request for such funds.
12. Progress Reports Sponsor shall make quarterly and annual progress reports required under sections 8.1 and 8.2 of this Grant Agreement on the standard forms provided by the Rural Legacy Program. Quarterly reports shall be submitted to the Maryland Department of Natural Resources within three weeks of the end of each quarter as determined by the execution date of the Grant Agreement. The Annual Report shall be due thirty (30) days after the end of the state fiscal year.
13. Future Funding The Board will consider the evaluations, progress reports and information required to be reported to the Rural Legacy Board, under the grant general conditions hereinabove along with the Rural Legacy criteria as set forth in the Law, in their review of any future Rural Legacy applications.

# ATTACHMENT C

Page 1 of 1

## Rural Legacy Grant Agreement Attachment C

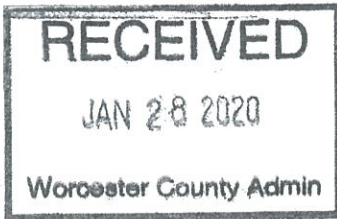
Rural Legacy Area: Coastal Bays	<b>FY 2020 Grant Award</b>
Sponsor's Name: County Commissioners of Worcester County	
Contact Name: Katherine Munson	Contact Telephone Number: 410-632-1220 ext 1302
Contact Address: Worcester County Department of Development Review and Permitting; 1 W. Market St, #1302; Snow Hill, MD 21863	
In accordance with Section 2.1, Amount of Grant Not to Exceed \$250,382	

Rural Legacy Model Easement being used: Yes ☒ No ☐ (If no, then attach the Alternate Model Easement to be used)

### Eligible Properties

Owner's Name	Property Address	Priority Level	County	Tax Map Information					Acres	Fee	Easement
				Map	Parcel	Grid	Page	Lot			
Truitts Landing Farm (#1)	Truitts Landing Road, Snow Hill	1	Wo	72	11	19			112.03		X
Stevens, et al (#2)	Stockton Road, Pocomoke City	1	Wo	86	127	13			86.3552		X
Pilchard, Shirley and Gary (#3)	5615 Onley Road, Pocomoke City	1	Wo	79	181	15			54		X
Porter Mill Properties (#4)	Snow Hill Road, Stockton	1	Wo	94	7	8			155.02		X
Porter Mill Properties (#5)	Snow Hill Road, Stockton	1	Wo	94	173	9			59.07		X
Porter Mill Properties (#6)	Snow Hill Road, Stockton	1	Wo	94	9	3			22.25		X
Pilchard, Everett Holland (#7)	6745 Box Iron Road, Snow Hill	2	Wo	80	10	2			92.9843		X
Todd E Burbage Irrevocable Trust (#8)	5631 Taylor Road, Snow Hill	2	Wo	57	42	19			154.38		X




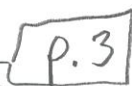
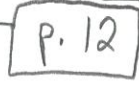


**Worcester County**  
Department of Environmental Programs

Memorandum

**To:** Harold L. Higgins, Chief Administrative Officer

**From:** Robert J. Mitchell, LEHS   
Director, Environmental Programs

**Subject:** Rural Legacy – FY 21 Grant Applications  
Dividing Creek Rural Legacy Area —   
Coastal Bays Rural Legacy Area — 

**Date:** January 27, 2020

Attached you will find a memorandum from Katherine Munson and applications for funding for both the Coastal Bays and Dividing Creek Rural Legacy Areas (RLA). The amount requested in these applications totals \$2,000,000, approximately \$1,000,000 for each of the RLAs. There is no required County match to participate in this state program. The County is in partnership with Somerset County for the Dividing Creek RLA and they have the Lower Shore Land Trust (LSLT) handle the administrative, accounting, and reporting responsibilities as a co-grantee for easements in Somerset County.

Rural Legacy pays landowners for permanent conservation easements on their properties. The program is funded through a combination of state Program Open Space and general obligation bonds from the state's capital budget. There are two (2) approved legacy areas in Worcester County – the Dividing Creek RLA (approved 2008) and the Coastal Bays RLA (approved 1999). This requested funding pays for perpetual conservation easements and reimburses the county for administrative costs and continued monitoring. The usual award is \$1-2MM per legacy area, depending on funding levels approved by the state.

Typically, we request enough money to fund an acreage total that can be serviced by county staff and achievable in an 18 month cycle. The usual award is \$1-2MM per RLA. Somerset County is also reviewing their portion of the Dividing Creek RLA and the LSLT is the lead sponsor for the Somerset portion of the RLA.

The program requires a preference indicated each cycle for which RLA we wish to have forwarded for preferred funding. We typically alternate between the two RLA's as counties with multiple areas need to choose their lead legacy area in their applications. Accordingly, we recommend the Dividing Creek RLA as the preferred RLA on our application. Therefore, I respectfully recommend that the County Commissioners authorize President Mitrecic to sign the letter where indicated and include the recommended preference.

**Citizens and Government Working Together**

If you have any questions or need any additional information please let me know. Both Ms. Munson and I will be available to discuss this request with you and the County Commissioners at your convenience.

**Attachments**

cc: Roscoe Leslie  
Katherine Munson  
Kim Reynolds

## Cover Sheet Rural Legacy Application

**Please complete this Cover Sheet and submit it with all Attachments.**

Rural Legacy Area Name: DIVIDING CREEK	
Name of Sponsor: Somerset and Worcester Counties, Lower Shore Land Trust	
County or Counties Where Eligible Properties Located: Somerset and Worcester	
Name of Sponsor's Lead Contact: Jared R. Parks, Lower Shore Land Trust	
Contact's Title: Land Programs Manager	
Daytime Phone Number: 443-234-5587	Fax #: N/A
E-Mail Address: jparks@lowershorelandtrust.org	
Address: 100 River Street, Snow Hill, MD 21863	

As authorized representative of the above referenced Sponsoring organization, I hereby certify that the information in this application is accurate and complete to the best of my knowledge.

Signature:

Date:

## RURAL LEGACY PROGRAM – FISCAL YEAR 2021

### RENEWAL AND AREA EXPANSION GRANT APPLICATION

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#### SECTION I: RLA Statistical Information

1. What is the total acreage of the existing Rural Legacy Area (RLA)? 67,812
2. With this Application, is a RLA boundary expansion being requested? No (Yes or No)  
If so, how many additional acres are in the expansion area? N/A  
What is the total acreage of the proposed RLA with expansion: N/A  
Please describe in detail the adjustments to the boundaries of the approved RLA. N/A
3. i. How much of the acreage within the existing RLA (in acres), is:
  - a. Unprotected land: 40,116
  - b. Protected land (all sources): 26,213
  - c. Developed land: 1,483ii. Expansion Only - If an expansion is proposed, how much of the acreage within the entire (existing plus proposed expansion) RLA (in acres), is: N/A
  - a. Unprotected land \_\_\_\_\_
  - b. Protected land (all sources) \_\_\_\_\_ (*Through permanent conservation programs – MALPF, MET, CREP Permanent easements, County conservation easements, etc.*)
  - c. Developed land \_\_\_\_\_
4. How many acres do you propose to protect with the funds requested in this Application?  
664 acres
5. What is the projected total cost per acre for land acquisition proposed in this Application? (Include land and transactional costs, i.e. administrative, indirect and compliance costs.)  
  
Easement: \$2200/acre farmland; \$1500/acre woodland  
Fee Simple: N/A
6. What is the total amount of Rural Legacy Program (RLP) grant funds being requested in this Application? \$1,000,000
7. How many acres, including the acres proposed in this Application, do you plan to protect with RLP funds over the next 10 years of the Program? We have a goal to protect 50% of non-developed and within the DCRLA. The goal is 67,812 acres – 1,483 acres of developed

lands divided by 2 or 33,165 acres. 26,213 acres are already protected, 1,875 are under contract, and 140 acres are to be protected in MALPF, so we have 4,937 acres to protect in 10 years to reach the 50% goal.

8. Estimate the amount of additional RLP funds that will be needed to preserve the RLA goal acreages (based on current easement prices and the acreages currently preserved in the RLA). \$9,380,300 (4,937 acres @ \$1,900/acre)

## **SECTION II: Leveraging RLP Funds**

1. Describe ways the Sponsor utilized their own funds in the past 12 months to permanently conserve land in the RLA.

N/A

2. Detail all funding sources/conservation programs that were utilized in the past 12 months to permanently conserve land in the RLA.

Worcester County is currently working on a MALPF easement on the 140-acre Wilkins property.

MD DNR also acquired 914 acres in the Worcester County portion of the DCRLA. The total purchase price for the 914 acres was in excess of \$3,150,000.

## **SECTION III: Bonus Points**

1. What was the average width of riparian buffers for RLA properties acquired in the past 12 months? 100 feet from tidal waters
2. Describe any form of public access that has been permitted on properties during the past 12 months, i.e., hunting, educational school trips, trail access? Leased hunting is permitted on all properties.
3. Describe any social benefits that resulted because of RLA properties preserved during the past 12 months, i.e., support for local food supply, farm-to-schools, benefits to underserved communities, innovative partnerships, linking children to nature? The Holland family, who own Chesapeake Bay Farms, own farmland in the DCRLA—one parcel under RLP easement and three under MALPF easement. These farms support a significant portion of their dairy enterprise, including the creamery, which is protected by a MALPF easement. The ice cream and cheese produced with milk from the farm are sold locally. In addition, the farm/creamery/retail store on site hosts many visitors including locals, tourists, and school groups.
4. Describe any enhanced best management practices included in RLA easements during the past 12 months. N/A

#### **SECTION IV: Special Circumstances**

Describe any unique circumstances or specific projects that should be considered for potential RLP funding. Please limit your response (if any) to one (1) page.

Properties listed as # 1, 2, and 3 are all in Somerset County (next County in line for funding of the 2) and are identified here as having special circumstances.

Properties 1 and 2 are portions of a family farm owned by a brother and sister in the recently expanded Somerset County portion of the RLA. They own 4 contiguous parcels, but the brother owns 1 parcel, the sister owns 2 parcels, and they own 1 parcel together. During conversations about protection, they have indicated that they would like to sell easements on their individually owned parcels and donate an easement on the co-owned parcel to help offset any tax burdens triggered by the easement sales. This, however, would necessitate doing all 4 parcels in the same calendar year for tax purposes. Mr. Insley's property includes his veterinary clinic which is a very important local clinic serving the local community and agricultural operations, the remainder of the parcel is largely a horse farm.

Property #3 is in the original RLA and would have been the next top priority if the area had not been expanded. It is a relatively small parcel, and we would really like to complete this project with the 2 above mentioned projects, if at all possible, since the landowners are very motivated sellers and may not be able to keep the property in the family if we can not work with them on an easement sooner than later. It is owned by three sisters and is the last parcel remaining of larger farm holdings of their family.

#### **SECTION V: Multiple County Priority Designation**

For Sponsors of more than one RLA in the same County, please submit a letter of RLA funding preference. Letter Attached

#### **SECTION VI: Proposed Property Acquisitions**

Complete the Proposed Acquisition List Form for the top ten (10) proposed acquisitions in the RLA for Fiscal Year 2021 funding (submit Form with Application).

#### **SECTION VII: FOR EXPANSION REQUESTS ONLY**

Submit digital geographic information (GIS data) for the boundary of the RLA. This should be transmitted electronically by email or other type of online file transfer service (*Dropbox, WeTransfer, Box*, etc.) to the Rural Legacy Program as an ArcView shapefile in state plane 83 meters projection. This information must be submitted simultaneously with the Application (it can be as a separate email but should immediately follow the initial email with this Application) or the Application will be considered incomplete. N/A

#### **SECTION VIII: Annual Report**

If the Annual Report for the calendar year that just ended (January – December) has not already been submitted, it MUST be included with this Application. Attached

#### **SECTION IX: Stewardship**

All monitoring reports that were due in the prior calendar year (January – December) that have not yet been submitted are now DUE and MUST accompany submission of this Application.

---

**Please submit an electronic copy (in Word or PDF format) of the Application and all Attachments.**

**SUBMIT COMPLETED RURAL LEGACY PROGRAM GRANT APPLICATIONS TO:**

**Rural Legacy Program  
Land Acquisition and Planning Unit  
Tom McCarthy, Conservation Easement Supervisor  
Tom.mccarthy@maryland.gov**

***Fiscal Year '21 Grant Application submission deadline: Second Tuesday in February by 5:00 p.m.  
(\*unless otherwise given specific permission)***



State of Maryland Department of Natural Resources  
Rural Legacy Program Application

**Proposed Acquisitions – Fiscal Year 2021**

**Rural Legacy Area Name**      DIVIDING CREEK

PROPERTY	Owner's Name	Property Address	Estimated Cost	Acres	Tax Map Information					Easement or Fee (E or F)	Buffer Width	Public Access (Y or N)	Social Benefits
					Tax Map	Account ID #	Grid	Parcel	Lot				
Pending	L. Beauchamp Parcel #67 on list	Follow Ditch Road	\$215,000	102	SO 34	04060539	14	31		E	N/A	N	N
Pending	L. Carey Parcel #43 on list	Bowlend Road	\$173,000	81	SO 42	04068785 04066138	10,11	157, 57		E	N/A	N	N
Pending	J. Beauchamp Parcel #68 on list	Dublin Road	\$185,000	60	SO 34	04062655 04167221	4	5, 87		E	50	N	N
Pending	Barnes Parcel #28 on list	Dividing Creek Road	\$1,000,000	711	WO 77	07006322	15	8		E	100	N	N
Pending	E.S. Adkins Parcel #22 on list	South of Whitesburg RD	\$700,000	914	WO 16	07006829	15	8		E	100	N	N
1	Insley Parcel #77 on list (in proposed expansion area)	Perryhawkin Road	\$222,000	101.56	SO 16	15017325	17	7		E	100	N	N
2	Layfield Parcel #79 on list (in proposed expansion area)	Perryhawkin Road	\$297,000	135.39	SO 16	15005157 15005149	17	5	2 lots	E	100	N	N

RL Program Application  
Proposed Acquisitions FY 2020

RLA Name: DIVIDING CREEK

Page 3

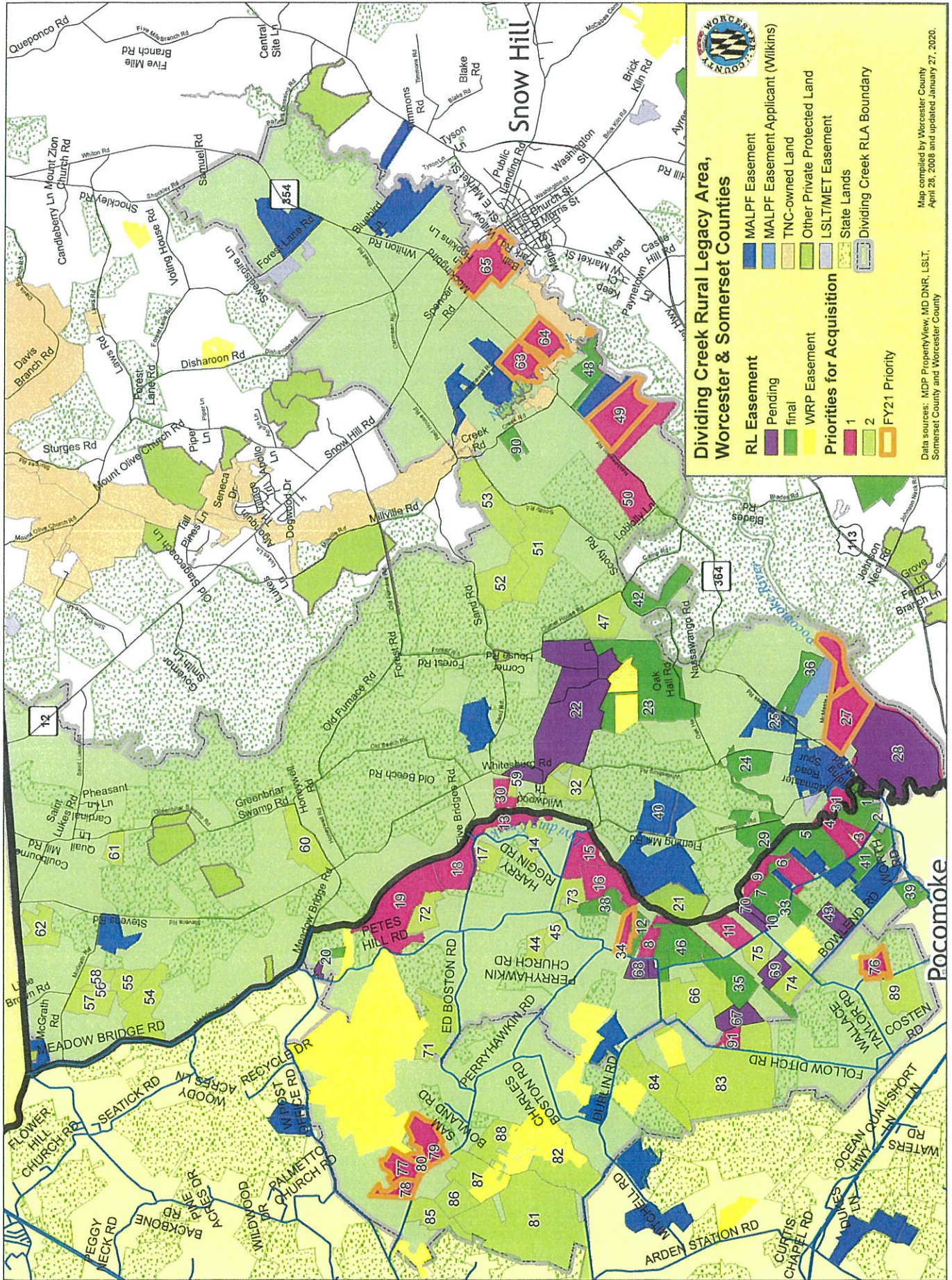
PROPERTY	Owner's Name	Property Address	Estimated Cost	Acres	Tax Map Information					Easement or Fee (E or F)	Buffer Width	Public Access (Y or N)	Social Benefits
					Tax Map	Account ID #	Grid	Parcel	Lot				
3	Bishop Parcel #34 on list	33713 Dublin Road	\$121,000	55.6	SO 25	04060660	23	19		E	N/A	N	N
4	Steve Beauchamp Parcel 91 on list	9237 Follow Ditch Road	\$104,000	47.5	SO 34	04060571	14	54		E	N/A	N	N
5	Manufacturers and Traders Trust Co Parcel #64 on list	Nassawango Road	\$250,000	144.48	WO 63	02007819	7	85		E	100	N	N
6	Manufacturers and Traders Trust Co Parcel #65 on list	5531 Snow Hill Road	\$800,000	324.824	WO 55	02005085	21	13		E	100	N	N
7	Fulton, Martha and Jennie Parcel #63 on list	4824 Pennewell Road	\$350,000	151.3	WO 63	02007371	7	83		E	100	N	N
8	Boyer Family LLC Parcel #49 on list	Nassawango RD	\$560,000	256	WO 62	07005040	24	24		E	100	N	N

RL Program Application  
Proposed Acquisitions FY 2020

RLA Name: DIVIDING CREEK  
Page 3

PROPERTY	Owner's Name	Property Address	Estimated Cost	Acres	Tax Map Information					Easement or Fee (E or F)	Buffer Width	Public Access (Y or N)	Social Benefits
					Tax Map	Account ID #	Grid	Parcel	Lot				
9	Double J's Hunting Parcel #19 on list	Pete's Hill Road	\$660,000	329.1	SO 17	15007729	11	7		E	100	N	N
10	Dryden Parcel #76 on list (in proposed expansion area)	Hayward Road	\$135,000	116	SO 42	04073134 04063031	16	10, 195		E	100	N	N







## Cover Sheet Rural Legacy Application

**Please complete this Cover Sheet and submit it with all Attachments.**

Rural Legacy Area Name: Coastal Bays	
Name of Sponsor: Worcester County	
County or Counties Where Eligible Properties Located: Worcester County	
Name of Sponsor's Lead Contact: Katherine Munson	
Contact's Title: Planner V	
Daytime Phone Number: 410-632-1220 ext 1302	Fax #: 410-632-2012
E-Mail Address: kmunson@co.worcester.md.us	
Address: Department of Environmental Programs; 1 West Market Street, 1306	
Worcester County Government Center, Snow Hill, MD 21863	

As authorized representative of the above referenced Sponsoring organization, I hereby certify that the information in this application is accurate and complete to the best of my knowledge.

Signature:

Date:

Rural Legacy Area Name:

**RURAL LEGACY PROGRAM – FISCAL YEAR 2021**

**RENEWAL AND AREA EXPANSION  
GRANT APPLICATION**

**SECTION I: RLA Statistical Information**

1. What is the total acreage of the existing Rural Legacy Area (RLA)? 45,945 acres
2. With this Application, is a RLA boundary expansion being requested? No (Yes or No)  
If so, how many additional acres are in the expansion area? \_\_\_\_\_  
What is the total acreage of the proposed RLA with expansion: \_\_\_\_\_  
Please describe in detail the adjustments to the boundaries of the approved RLA.
3. i. How much of the acreage within the existing RLA (in acres), is:
  - a. Unprotected land 27,325 +/-
  - b. Protected land (all sources) 17,500 +/- (*Through permanent conservation programs – MALPF, MET, CREP Permanent easements, County conservation easements, etc.*)
  - c. Developed land 1,120 +/-

*\*please note these three categories are EXCLUSIVE of each other and should add up to the total acres in the RLA. There should be no overlap between a.b. and c.*
- ii. Expansion Only - If an expansion is proposed, how much of the acreage within the entire (existing plus proposed expansion) RLA (in acres), is:
  - a. Unprotected land \_\_\_\_\_
  - b. Protected land (all sources) \_\_\_\_\_ (*Through permanent conservation programs – MALPF, MET, CREP Permanent easements, County conservation easements, etc.*)
  - c. Developed land \_\_\_\_\_

*\*please note these three categories are EXCLUSIVE of each other and should add up to the total acres in the RLA. There should be no overlap between a.b. and c.*
4. How many acres do you propose to protect with the funds requested in this Application?  
430 +/- acres
5. What is the projected total cost per acre for land acquisition proposed in this Application? (Include land and transactional costs, i.e. administrative, indirect and compliance costs.)

Easement \$2,200

Fee Simple N/A

6. What is the total amount of Rural Legacy Program (RLP) grant funds being requested in this Application? \$1,000,000.00
7. How many acres, including the acres proposed in this Application, do you plan to protect with RLP funds over the next 10 years of the Program? 3,500
8. Estimate the amount of additional RLP funds that will be needed to preserve the RLA goal acreages (based on current easement prices and the acreages currently preserved in the RLA). \$7,350,000.00

## **SECTION II: Leveraging RLP Funds**

1. Describe ways the Sponsor utilized their own funds in the past 12 months to permanently conserve land in the RLA. (such as not seeking reimbursement for administrative, program compliance, or incidental costs) None
2. Detail all funding sources/conservation programs that were utilized in the past 12 months to permanently conserve land in the RLA (ex: REPI/ACUB, MALPF, MET, County, Federal, Private, Installment Purchase Programs, etc. If unsure, consider contacting the local County MALPF Administrator or other County staff to obtain number of easements and acreages preserved through all programs, including County open space acreage preserved.). None this year

## **SECTION III: Bonus Points**

1. What was the average width of riparian buffers for RLA properties acquired in the past 12 months? One Hundred (100) feet
2. Describe any form of public access that has been permitted on properties during the past 12 months, i.e., hunting, educational school trips, trail access? Many RL properties are leased for hunting; one property is used for the annual Worcester County Herp Search in May; another property is used by Delmarva Birding Weekend for a walking tour and for landowner educational outreach conducted by Lower Shore Land Trust annually.
3. Describe any social benefits that resulted because of RLA properties preserved during the past 12 months, i.e., support for local food supply, farm-to-schools, benefits to underserved communities, innovative partnerships, linking children to nature? None
4. Describe any enhanced best management practices included in RLA easements during the past 12 months (these would be in addition to the standard practices such as impervious surface limitation of 2%; CAFO restriction; 100 foot stream buffers; Soil Conservation and



Water Quality Plan; and Forest Stewardship Plan/compliance with the *Soil Erosion and Sediment Control Guidelines for Forest Harvest Operations in Maryland*) None

#### **SECTION IV: Special Circumstances**

Describe any unique circumstances or specific projects that should be considered for potential RLP funding. Please limit your response (if any) to one (1) page.

We strongly anticipate that three landowners will be ready to go to settlement by end of 2020 calendar year: Porter Mill Properties (#1 and #2) and Truitts Landing Farm, LLC (#3). Appraisals have been completed for #1 and #2. Boundary surveys are already complete. Our FY17 and FY20 funding awards will be unable to cover these projects, assuming all other pending projects go to settlement. The estimated cost for these three projects is \$950,000.00.

#### **SECTION V: Multiple County Priority Designation**

For Sponsors of more than one RLA in the same County, please submit a letter of RLA funding preference.

#### **SECTION VI: Proposed Property Acquisitions**

Complete the Proposed Acquisition List Form for the top ten (10) proposed acquisitions in the RLA for Fiscal Year 2021 funding (submit Form with Application).

#### **SECTION VII: FOR EXPANSION REQUESTS ONLY**

Submit digital geographic information (GIS data) for the boundary of the RLA. This should be transmitted electronically by email or other type of online file transfer service (*Dropbox, WeTransfer, Box*, etc.) to the Rural Legacy Program as an ArcView shapefile in state plane 83 meters projection. This information must be submitted simultaneously with the Application (it can be as a separate email but should immediately follow the initial email with this Application) or the Application will be considered incomplete.

#### **SECTION VIII: Annual Report**

If the Annual Report for the calendar year that just ended (January – December) has not already been submitted it **MUST** be included with this Application.

#### **SECTION IX: Stewardship**

All monitoring reports that were due in the prior calendar year (January – December) that have not yet been submitted are now **DUE** and **MUST** accompany submission of this Application.

---

Please submit an electronic copy (in Word or PDF format) of the Application and all Attachments.

**SUBMIT COMPLETED RURAL LEGACY PROGRAM GRANT APPLICATIONS TO:**

**Rural Legacy Program  
Land Acquisition and Planning Unit  
Tom McCarthy, Conservation Easement Supervisor  
Tom.mccarthy@maryland.gov**

***Fiscal Year 2020 Grant Application submission deadline): Second Tuesday in February by 5:00 p.m.  
(\*unless otherwise given specific permission)***

State of Maryland Department of Natural Resources  
Rural Legacy Program Application

**Proposed Acquisitions – Fiscal Year 2020**

Rural Legacy Area Name Coastal Bays

PROPERTY	Owner's Name	Property Address	Estimated Cost	Acres	Tax Map Information					Easement or Fee (E or F)	Buffer Width	Public Access (Y or N)	Social Benefits (Y or N)
					Tax Map	Account ID #	Grid	Parcel	Lot				
1	Porter Mill Properties, LLC ("Ward Farm")	W side Snow Hill Road	\$500,000.00	236.64	94	08008051 08008043 08008086	3, 8	7, 9, 173		E	100	N	N
2	Porter Mill Properties, LLC ("Dickerson Farm")	W side of Snow Hill Road	\$200,000.00	81.6	94	08013810	8	252		E	100	N	N
3	Truitts Landing Farm	Truitts Landing Road	\$250,000.00	112.03	72	02012928	19	11		E	100	N	N
4	Long Point Farm, Inc.	E side Greenbackville Road	\$500,000.00	232.44	94	08007209	23	44		E	100	N	N
5	Connor, Mary Twilley	4308 Paw Paw Creek Road	\$400,000.00	177	72	02012138	6	50		E	100	N	N

RL Program Application  
Proposed Acquisitions FY 2020

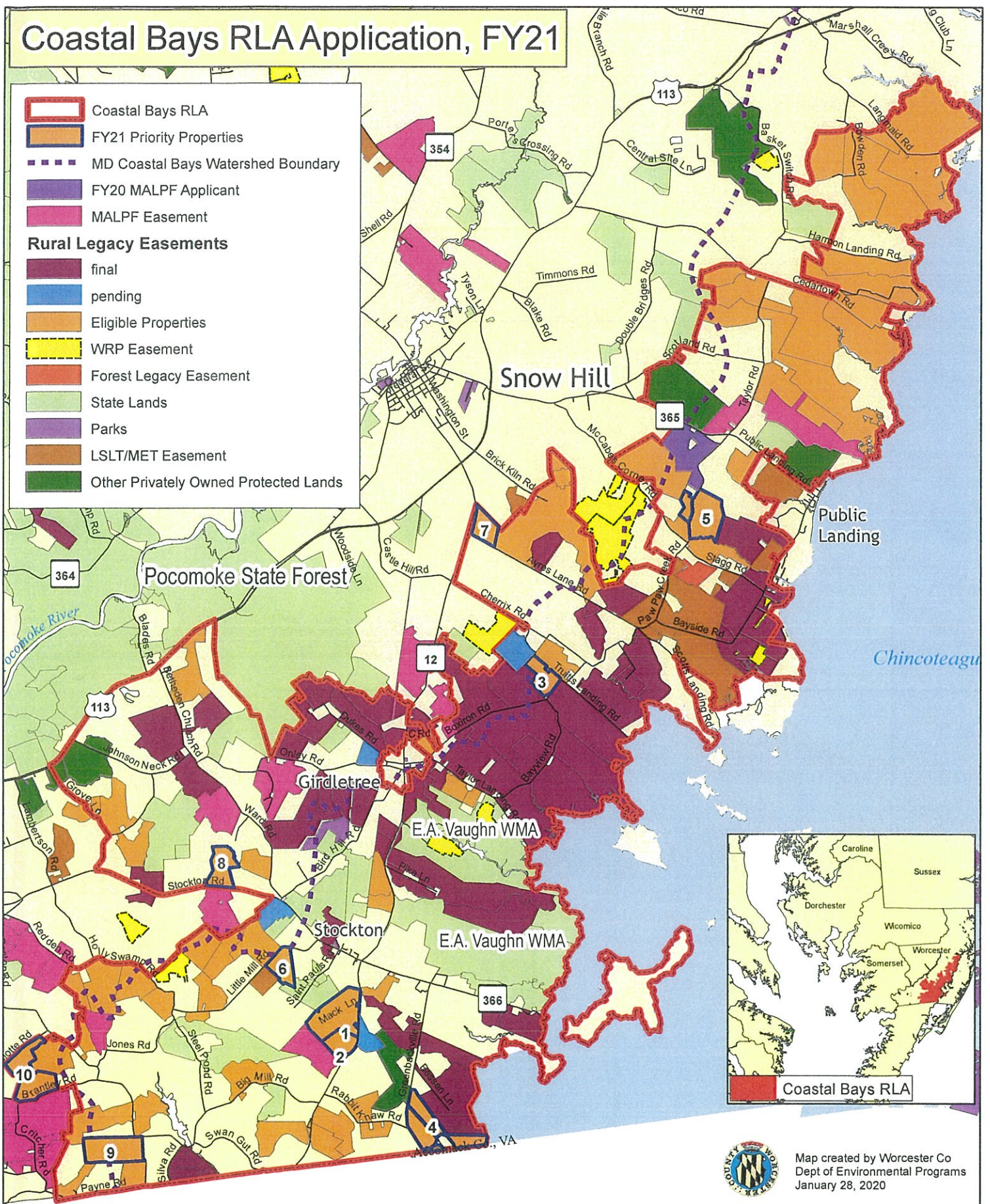
RLA Name: Coastal Bays  
Page 2

PROPERTY	Owner's Name	Property Address	Estimated Cost	Acres	Tax Map Information					Easement or Fee (E or F)	Buffer Width	Public Access (Y or N)	Social Benefits (Y or N)
					Tax Map	Account ID #	Grid	Parcel	Lot				
6	Pusey, Joseph et al	5174 Little Mill Road	\$250,000.00	106	86	08005281	19	36		E	100	N	N
7	Holland, Dale	Snow Hill Road	\$180,000.00	78.54	71	02011735	6	5		E	100	N	N
8	John T. Payne Trust	N side Stockton Road	\$200,000.00	113.22	85	08003319	12	23		E	100	N	N
9	Aydelotte, Benjamin and Brooks	W side Payne Road	\$300,000.00	190	101	01014609	3	21		E	100	N	N
10	Jones, Richard	Brantley Road	\$120,000.00	81	93	01011413	13	71		E	100	N	N



# Coastal Bays RLA Application, FY21

- Coastal Bays RLA
- FY21 Priority Properties
- MD Coastal Bays Watershed Boundary
- FY20 MALPF Applicant
- MALPF Easement
- Rural Legacy Easements**
  - final
  - pending
  - Eligible Properties
  - WRP Easement
  - Forest Legacy Easement
  - State Lands
  - Parks
  - LSLT/MET Easement
  - Other Privately Owned Protected Lands



Map created by Worcester Co  
Dept of Environmental Programs  
January 28, 2020

2.5 1.25 0 2.5 Miles



DRAFT

February 4, 2020

Rural Legacy Board  
c/o Rural Legacy Program  
Land Acquisition and Planning Unit  
Maryland Department of Natural Resources  
580 Taylor Ave., E-4  
Annapolis, MD 21401

RE: Coastal Bays and Dividing Creek Rural Legacy Areas, FY20 Applications

Dear Members of the Rural Legacy Board:

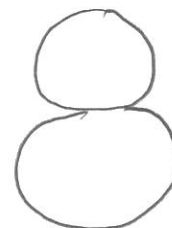
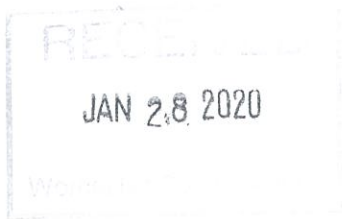
The Worcester County Commissioners are pleased to submit requests for funding for both the Coastal Bays Rural Legacy Area (RLA) and the Dividing Creek RLA. Since we are requesting funding for more than one RLA, we are asked to indicate which application we favor for funding in FY20. We place higher priority on the Dividing Creek RLA application this year, as the last award for Dividing Creek RLA acquisitions was made in FY19.

Thank you for considering our FY21 applications. We look forward to continuing to work with the Rural Legacy Program on our shared land protection goals in FY21.

Sincerely,

Joseph M. Mitrecic  
President

cc: Bob Mitchell, Director, Environmental Programs (EP)  
David Bradford, Deputy Director, EP  
Katherine Munson, Planner V, EP




**Worcester County**  
Department of Environmental Programs

Memorandum

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**To:** Harold L. Higgins, Chief Administrative Officer

**From:** Robert J. Mitchell, LEHS   
Director, Environmental Programs

**Subject:** **Maryland Community Resilience Grant**  
Selsey Road Project Update and  
Request for Signature – Title Services

**Date:** 1/27/20

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This memo is a progress update for the County Commissioners on the Selsey Road Shoreline Resiliency Project. Worcester County was awarded funding from Maryland's Department of Natural Resources (DNR), Chesapeake and Coastal Division, for a Community Resilience Grant to assist with coastal impacts of climate-related hazards. The planned restoration is for the Selsey Road area, a part of the larger Cape Isle of Wight community in West Ocean City. This is an excellent opportunity to contribute to building coastal storm resiliency within the Cape Isle of Wight community. It is our intent that demonstration projects of this type will springboard into similar grant opportunities in the near future for other county communities.

The grant supports design and permit acquisition for the Selsey Road Protection and Marsh Restoration Project. Being selected as a Phase I recipient in this program, we are guaranteed construction funding after design and permitting are concluded. As the attached memo from David Bradford details, we have completed the design award and conducted required site meetings with the selected contractor and DNR, MDE and Corps personnel to review the project design. Environmental Programs has also held the first of two community meetings to review the proposed design and take questions and concerns from the residents about the project. This meeting was very well attended by the area property owners who were very pleased with the design and the potential protection the project would provide for their community. Commissioner Church attended this meeting along with the design contractor and DNR and Critical Area Commission staff.



We have attached the proposed design and have added pertinent power point slides illustrating the project limits and historical erosion taken place in this area. This design incorporates marsh restoration and additional techniques that will greatly assist with road and residential property protection. Design changes were added as a result of county and state staff discussions with contractor and additional data gleaned from site visits, drone footage, and historical area data. Details on the changes would include movement of some of the sand sills further offshore, making more of a sill and breakwater system as part of the design, providing that the inlets to the tidal pond in the middle of the project area were left as an active features, beefing up the rock placement to tie into an existing revetment along the road to assist with northeast wave impacts, and movement of the breakwater system a little further offshore to get it away from the existing phragmites which need to be eradicated.

In Mr. Bradford's memo, he has explained the difficulties with DNR's property research in identifying the parties needed to sign these permits. We have been provided the attached real estate title services agreement for the title firm DNR utilizes to finally complete this work. The cost for this service can be paid out of remaining project grant funds. To keep to the schedule and complete the design and permitting by July 2020, we need this work finished. I respectfully request that the County Commissioners authorize President Mitrecic to sign the letter where indicated so we may complete this item.

If you have any questions or need any additional information please let me know. Both Mr. Bradford and I will be available to discuss with you and the County Commissioners at your convenience.

#### Attachments

cc: David Bradford  
Katherine Munson  
Jenelle Gerthoffer  
Billy Birch



DEPARTMENT OF  
ENVIRONMENTAL PROGRAMS

## Worcester County

GOVERNMENT CENTER  
ONE WEST MARKET STREET, ROOM 1306  
SNOW HILL, MARYLAND 21863  
TEL: 410.632.1220 / FAX: 410.632.2012

LAND PRESERVATION PROGRAMS  
STORMWATER MANAGEMENT  
SEDIMENT AND EROSION CONTROL  
SHORELINE CONSTRUCTION  
CRITICAL AREA PROGRAMS  
FOREST CONSERVATION

WELL & SEPTIC  
WATER & SEWER PLANNING  
PLUMBING & GAS  
COMMUNITY HYGIENE  
AGRICULTURAL PRESERVATION  
ADVISORY BOARD

### MEMORANDUM

DATE: January 24, 2020  
TO: Robert J. Mitchell, Director  
FROM: David M. Bradford Jr., Deputy Director  
SUBJECT: Community Resiliency Grant - Selsey Road Update

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This memo is to serve as an update regarding this project. As you are aware we were awarded a community resiliency grant from Md. Department of Natural Resources to perform phase I (design and permitting) of a restoration project along approximately 1,000 ft. of shoreline on the north side of Selsey Road in the Cape Isle of Wight community. This particular site is repeatedly effected by storm events given its north/northeast orientation. Significant erosion has occurred over the years and continues to worsen over the years. Residents within this area routinely have to deal with flooding issues within this area as a result of this continued erosion and marsh degradation. There are approximately 20 homes that are located directly across the street from this area that will benefit from this restoration work as will the County owned infrastructure located here. Restoration activities will include various methods of nature based protection such as stone sills, marsh creation, and sand management techniques to name a few.

Since our award and acceptance of this grant funded project we have completed the following tasks:

- Mandatory pre-bid site meeting performed. January 9, 2019.
- Contractor Bid deadline January 28, 2019.
- Contractor's Agreement executed with Coastline Design PC. March 2019.
- DNR performed initial topographic survey. March 2019
- Contractor (Coastline Design) performed field work. March/April 2019.
- Performed a preapplication meeting with DNR, MDE, Army Corps of Engineers, and our contractor, Scott Hardaway with Coastline Design, P.C. June 21, 2019
- Held our 1<sup>st</sup> of 2 community meetings that was held at Ocean Pines Library that was well attended. June 28, 2019.
- DNR in conjunction with the Attorney's General Office has been researching and performing title research pertaining to a portion of the project. Currently ongoing.

The title research portion of this project has presently delayed forward movement and we are hopeful that DNR and the Attorney's General Office concludes their research very shortly. Once resolved, we will immediately move into drafting of final plans, scheduling of our second community meeting and then onto the permitting process. We may initiate the permitting process prior to the completion of this title research if it continues to delay the process in order to stay on schedule. If it is discovered that there is an additional or different property owner discovered through the title work, we can perform a permit modification to capture this revision and obtain applicable signatures. Per our RFP and Contractor's agreement we designated this phase I (design and permitting) to be completed by July, 2020.

As always, I will make myself available for any potential questions or concerns raised during the Commissioners meeting.

Please let me know if you have any questions.

Attachments: Selsey Road Shoreline Plan from Coastline Design 12-2-19 (4 pages)

Cc: Katherine Munson, Planner V (email)



**DEPARTMENT OF ENVIRONMENTAL PROGRAMS**

# **Selsey Road Shoreline Resiliency Project**

## **Design Drawings**

### **Attachment #1**



# Beach Restoration Project at Selsey Road Property Owners Association Inc. Worcester County, Maryland

## Index

No.	Drawing Title
C-1	Cover Sheet
C-2	Existing Conditions
C-3	Proposed Shoreline Layout & Typical Sections
C-4	Sediment and Erosion Control Notes & Details



SITE MAP  
NOT TO SCALE

## GENERAL NOTES

1. Mean tidal range is 0.9 feet.
2. Horizontal control was established by a closed loop traverse.
3. Vertical control is 0.0 feet = MLW.
4. Topographic and hydrographic data obtained June 6, 2019. Coordinate systems is MD State plane.
5. All dimensions and coordinates given in feet.
6. Existing topography has contour intervals every 1 ft above 0.0 MLW and every 1 ft below MLW.

## CONSTRUCTION SCHEDULE FOR SEDIMENT AND EROSION CONTROL

1. Contractor/Developer is to notify the Maryland Department of the Environment (410-374-2641) of the date construction is to begin at least five (5) days prior to the date (Time Frame=1 day)
2. Clear for and install stabilized construction entrances. (1 day)
3. Install silt fence and other erosion and sediment control practices. (1 day)
4. Install turbidity curtain as needed to prevent sedimentation during construction. (4 days)
5. All debris interfering with shoreline construction as construction proceeds. (continuous)
6. Clear trees and underbrush within designated areas as construction proceeds. (continuous)
7. Install breakwaters, sills, spurs, revetment, and sand nourishment. (450 days)
8. Stabilize and seed all upland disturbed areas as specified (2 days)
9. Remove turbidity curtain. (1 day)
10. After establishment of vegetative cover on site, remove silt fence and other erosion and sediment control devices after approval by Maryland Department of the Environment inspector (410-374-2641).



Location Map



*Blanca A. Baez*

AUGUST 27, 2019

COASTLINE DESIGN, P.C.





ALVIN GUYTON JR
ALVIN 00
ALVIN 60*



COASTLINE DESIGN, P.C.

Property Owners Association inc.  
Worcester County, Maryland

[illegible]

## Existing Conditions



C-2

Sheet	of	4
2		

Blaine G. Eason  
Page 17 of 18  
32213.37











DEPARTMENT OF ENVIRONMENTAL PROGRAMS

# Selsey Road Shoreline Resiliency Project

## Project Powerpoint Slides

### Attachment #2

## Selsey Road Shoreline Resiliency Project

2007 Aerial Imagery



## Selsey Road Shoreline Resiliency Project

Shoreline  
Changes Since  
2007

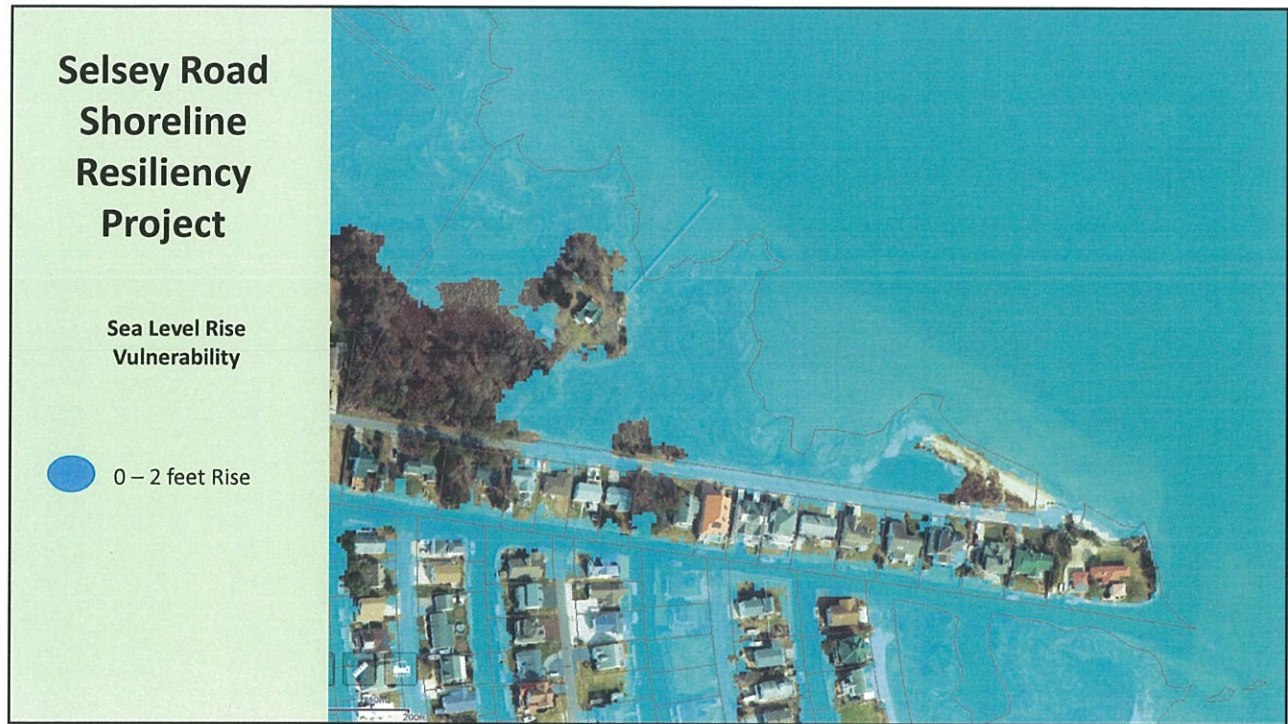
2018 Aerial Imagery













DEPARTMENT OF ENVIRONMENTAL PROGRAMS

# Selsey Road Shoreline Resiliency Project

## Title Services Agreement

### Attachment #3



**REAL ESTATE TITLE SERVICES AGREEMENT**

This Real Estate Title Services Agreement ("Agreement") is made this \_\_\_\_ day of \_\_\_\_\_, 2020 by and between THE COUNTY COMMISSIONERS OF WORCESTER COUNTY, MARYLAND (the "County") and WRIGHT, CONSTABLE & SKEEN, LLP ("Title Contractor").

Whereas, the County has chosen the Title Contractor, and the Title Contractor has agreed to perform work, provide services, and be bound by the terms of this Agreement.

Now, therefore, the County and Title Contractor agree as follows:

**SECTION I - DESCRIPTION OF SUBJECT PROPERTY**

The Title Contractor shall provide title services and an opinion of title as to ownership of the subject property described as:

County:	WORCESTER	
Owner:	KAREN L. COOGAN, et al	by deed 2086/476
Tax ID:	10-004470	
Location:	3.99 acs, Keyser Point Road, Ocean City, MD 21842	

**SECTION II: SCOPE OF REAL ESTATE TITLE AGREEMENT**

1. Conduct a full sixty (60) year title search and examination ("Full Title Search") to verify ownership of the subject property. Conduct a Full Title Search beyond sixty (60) years when necessary or as requested by the County.
2. Furnish a title opinion by mail within 90 calendar days of this Agreement. The title opinion shall include the following:
  - a. An Opinion of Title from Wright, Constable & Skeen, LLP to and for the benefit of Worcester County, Maryland.
  - b. A typed or legibly written chain of title
  - c. A complete Title Abstract, including notes, reports, grantor/grantee runs
  - d. Full, legible copies of all documents in the chain of title, including deeds of out-conveyance
  - e. Full, legible copies of all exceptions listed in the Opinion of Title Insurance
  - f. Legible copies of any estate documents required to insure title
  - g. Information concerning liens, judgments, requirements and

exceptions listed in the Opinion of Title Insurance

h. Invoice

SECTION III: GENERAL TITLE SERVICES & INSURANCE ASSIGNMENT REQUIREMENTS

A. Title Contractor must:

1. Comply with: all applicable Maryland laws, regulations, and other state requirements; all applicable title industry standards; and all otherwise applicable federal, state, and local standards and requirements.
2. Submit an Insured Closing Protection Letter (if title is being transferred or insured) unless previously submitted this calendar year
3. Submit a copy of the Title Contractor's current declaration page from its Errors and Omissions Policy unless previously submitted this calendar year
4. Submit a copy of the Title Contractor's current Certificate of Qualification unless previously submitted this calendar year

SECTION IV: GENERAL TERMS AND CONDITIONS – Not applicable

SECTION V: DELAYS AND EXTENSIONS OF TIME

- A. The Contractor agrees to prosecute the work continuously and diligently
- B. Time extensions will be granted for excusable delays that arise from unforeseeable causes beyond the control and without the negligence of the Contractor

SECTION VI: COMPENSATION AND METHOD OF PAYMENT

- A. Title Fee: The Title fee is \$2,500.00
- B. The Invoice for the Title Fee may include the following additional at-cost pass-through charges as applicable (documentation of charges is required):
  - a. Abstracting fees (Not to exceed \$1,500.00 without prior written authorization from the County; a copy of Abstractor's invoice must accompany the invoice)
  - b. Photocopies that must be obtained from the Clerk's Office
  - c. Lien Reports
  - d. Judgment Reports

- C. The Title Fee shall incorporate all routine overhead expenses, including but not limited to: in-house photocopying, telephone and facsimile expenses, notary fees, wire transfer fees, escrow services, and secretarial services
- D. Cancellation Fee: The County has the right to cancel this transaction at any time. Total compensation for a cancelled transaction shall be a Cancellation Fee equal to the total fees and costs incurred to the date of cancellation

Payment shall be due within thirty (30) days following Title Contractor's submission and Invoice. Title Contractor's FEIN is 52-1437984.

WRIGHT, CONSTABLE & SKEEN, LLP

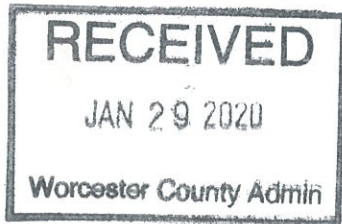
\_\_\_\_\_  
Title Company Authorized Signature  
Print Name: Kenneth F. Davies, Partner

\_\_\_\_\_, 2020  
Date

THE COUNTY COMMISSIONERS OF  
WORCESTER COUNTY, MARYLAND

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

\_\_\_\_\_, 2020  
Date




9

**Worcester County**  
Department of Environmental Programs

Memorandum

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**To:** Harold L. Higgins, Chief Administrative Officer

**From:** Robert J. Mitchell, LEHS   
Director, Environmental Programs

**Subject:** **MD DNR Grants Gateway FY21 Proposal**  
Water quality improvement and flood protection through retrofit of existing Bainbridge Pond & improvements to outfall channels within Ocean Pines and Refuge at Windmill Creek

**Date:** January 28, 2020

---

We have been working with the Maryland Coastal Bays Program staff, Ocean Pines Association staff, and officials from Maryland DNR and the state Department of Planning in exploring flooding and other corrective measure options for the Ocean Pines community. While some involve spring public informational meetings involving this and several other county departments, this specific matter would involve the submission of a grant to assist Ocean Pines in addressing flooding and stormwater issues for a portion of their community.

Maryland DNR has opened their FY 21 Grants Solicitation for funding of applications seeking technical and financial support for projects that foster healthy ecosystems, communities, and economies that are resilient in the face of change. Grants are made possible with funding through the Chesapeake and Atlantic Coastal Bays Trust Fund, the Coastal Resiliency Program, the Waterway Improvement Fund, the National Oceanic and Atmospheric Administration and the Environmental Protection Agency's Chesapeake Bay Program. Through the improved connections across grant programs, the department seeks to support more comprehensive and integrated projects that achieve (at least one of) the following outcomes:

- **Outcome 1** – Accelerate recovery and restoration of natural resources by implementing non-point source pollution reduction projects.
- **Outcome 2** – Enhance capacity to understand and effectively plan to address flood risks associated with a changing climate.

**Citizens and Government Working Together**



- **Outcome 3** – Utilize natural and nature-based infrastructure to enhance resilience to climate change.
- **Outcome 4** – Improve student ability to take action benefiting Chesapeake and coastal ecosystems through outdoor learning and stewardship.
- **Outcome 5** – Foster sustainable development and use of Maryland waterways with projects that benefit the general boating public. (*Expected Summer 2020*).

This proposed project would request funding under Outcome #1. The project would maximize water quality treatment to stormwater runoff prior to entering Shingle Landing Prong, a tributary to the Isle of Wight Bay. The work would retrofit the existing Bainbridge Pond amenity pond, and its associated outfall channels within the Ocean Pines (OP) development, as well as provide new interconnections for runoff from Bainbridge Pond and other currently untreated portions of Ocean Pines to access the pond network with the proposed Refuge at Windmill Creek (RWC) development. Retrofits to Bainbridge Pond are to include upgrades to bring it into compliance with current MDE wet pond (P-2) regulations through the introduction of forebays, aquatic benches, proper outfall structure, and improved dam embankment which will enable the facility to treat stormwater runoff for sediment and nutrient inputs. In addition, the pond's outfall channels are to be improved through the removal of compacted legacy materials and their replacement with a sand/planting material media (similar to a bioswale) to increase hyporheic interaction, improve the benthic environment, and aid in flood protection. The proposed interconnections will entail a redirection of runoff under Beauchamp Road (via new culverts) to allow currently untreated runoff to be treated within the new RWC pond network prior to being discharged into the Shingle Landing Prong. Through these improvements, +/-70 Acres of currently untreated urban runoff will be treated by MDE approved technologies.

Several early sections (Section 3 and portions of Sections 2, 6, & 7) of the Ocean Pines Community (totaling +/-233 Acres) were developed to drain toward Bainbridge Pond which was excavated to serve as an amenity for Ocean Pines' residents. The pond has been adequately maintained since it's original construction and while it is providing limited water quality benefits (primarily from sediment settlement due to simple pond storage) is not considered as providing water quality to upstream areas due to its lack of modern water quality treatment design characteristics (e.g. - aquatic benching, adequate outfall controls, forebays, minimum depths, etc.). Retrofits to Bainbridge Pond will seek to bring the pond into compliance with current MDE wet pond stormwater regulations.

Through the implementation of this project, we have the conversions for dozens of acres of currently untreated impervious surfaces to become treated and achieve TMDL's nutrient reductions from their baseline through the retrofit of the existing Bainbridge Pond and outfall channels within the Ocean Pines community to the Beauchamp Road Right-of-Way. Additional treatment will also be afforded the runoff as it is redirected into the wet pond network within the Refuge at Windmill Creek community, thereby increasing residency time within an approved water quality facility before being released into the Shingle Landing Prong. In addition, through the realignment of the outfall from Ocean Pines Section 7 into the proposed Refuge at Windmill Creek wet pond network, an additional +/-20-acres of currently untreated impervious areas will be treated and additional TMDL reductions will occur. Furthermore, through improvements to the

existing swale network to remove limiting soil layers, improved hyporheic connections will be established thereby further treating storm water runoff and improving environmental conditions.

The envisioned partner roles are attached. It is contemplated that we will have grants administration and would contribute plan review and permitting services as we currently provide locally for projects of this type. Ocean Pines Association has been very proactive in funding project scoping and design work in anticipation of having a shovel-ready project on deck for a grant opportunity such as this. While they may be able to fund this project in their maintenance budget, it would defer other community drainage maintenance and retrofit activities. They are seeking grant funding so they can do more work within their community. We have an opportunity here to realize both conveyance and treatment improvements with the completion of this project.

As the grant budget is being finalized, we anticipate an application level in the \$1.3 MM to \$1.4 MM range for the engineering and construction of this project and in-kind services would be provided by Environmental Programs staff who would normally be involved in the regulatory portion of an effort such as this.

Therefore, I would respectfully request that the County Commissioners consider authorizing our application for this grant opportunity. The grants are completed online and are due February 14<sup>th</sup>.

David and I will be available to discuss the matter with you and the County Commissioners at your convenience.

#### Attachments

cc: David Bradford  
Jenelle Irwin  
Katherine Munson  
Kim Watts





## **DEPARTMENT OF ENVIRONMENTAL PROGRAMS**

### **Grant Partner Roles**

#### **Worcester County:**

- **Grant Administration**
- **Review and approval authority over engineering plans, release of grant funds, etc**
- **Responsible for ensuring construction is completed according to approved plans and ensuring required ongoing maintenance is performed in a timely and adequate manner**
- **Will coordinate the anticipated additional culverts under, and roadside ditch improvements along, Beauchamp Road. Will ultimately be responsible for long-term maintenance of these facilities to ensure their continued efficacy**

#### **Maryland Coastal Bays Program:**

- **Project partner**
- **Will provide technical oversight and input to ensure that engineering design maximizes treatment for storm runoff before it enters the Shingle Landing Prong/St. Martin's River/Isle of Wight Bay (MD-8 digit 02130103)**
- **Will assist the County and community officials in project oversight throughout construction**

#### **Ocean Pines Association (under direction of Worcester County):**

- **Controls the property and easements required to construct the retrofits to Bainbridge Pond and outfall ditch improvements within the Ocean Pines development**
- **Will be responsible for providing construction oversight**
- **Will work with their engineers to develop a long-term maintenance plan for the retrofit pond and outfall channels to ensure they continue to function as designed after construction**
- **Will be responsible for community outreach to adjacent property owners and entire community to ensure all stakeholders understand why the improvements are being undertaken and their roles in ensuring its continued water quality benefits**
- **Responsible for coordinating with the Refuge at Windmill Creek developer and future HOA to ensure that the storm pond and piping network being constructed remains in good repair and suitable for its designed water quality purpose**

#### **Developer of Refuge at Windmill Creek:**

- **Responsible for constructing improvements on their property in accordance with the overall water quality improvement plan**
- **Responsible for ensuring an effective transfer of the construction SWM facilities to an ultimate HOA with proper directions and funding mechanisms to ensure the long-term efficacy of the constructed facilities**











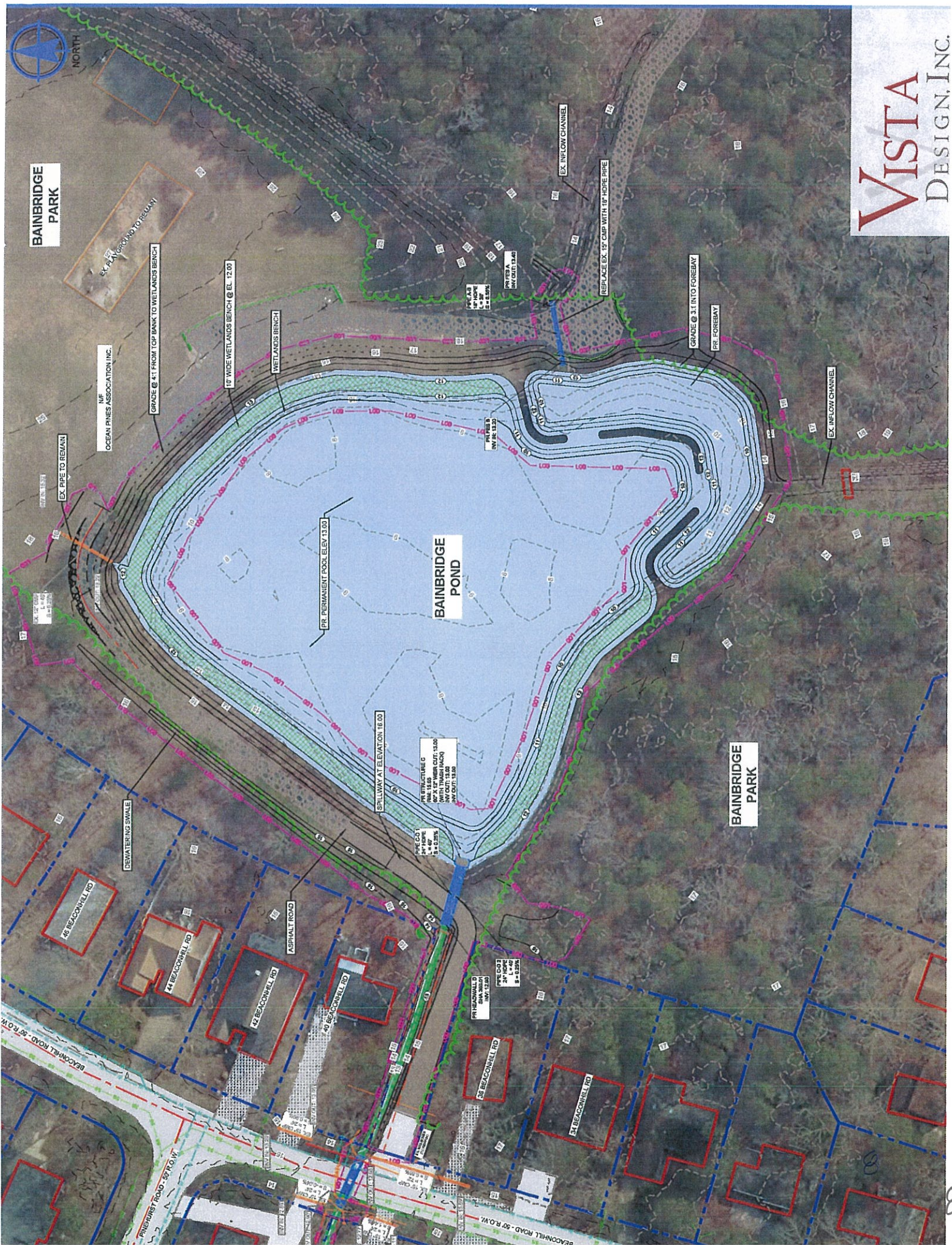
FOR DISC  
PURPOSE

**AREA 3 - DRAINAGE IMPROVEMENTS EXHIBIT**  
**OCEAN PINES, WORCESTER COUNTY, MARYLAND**

NOVEMBER 15, 2019

7







WATER QUALITY VOLUME REQUIRED	
TOTAL WATERSHED AREA	115.22 AC
EX. IMPERVIOUS AREA W/ WATERSHED	41.82 AC
R <sub>N</sub> USED TO DETERMINE WQV REQUIRED	0.376
WATER QUALITY VOLUME REQUIRED TO TREAT UNTRATED TO T <sub>1</sub> LEVEL	157,532 CF
WATER QUALITY TREATMENT VOLUME (FOREBAY)	22,839 CF
TOTAL WATER QUALITY VOLUME PROVIDED	314,460 CF
TREATMENT LEVEL PROVIDED	2.0'

FOREBAY SIZING	
PRETREATMENT REQUIRED IN FOREBAY (0.1 INCHES)	15,733 CF
PRETREATMENT VOLUME PROVIDED BY FOREBAY	22,839 CF

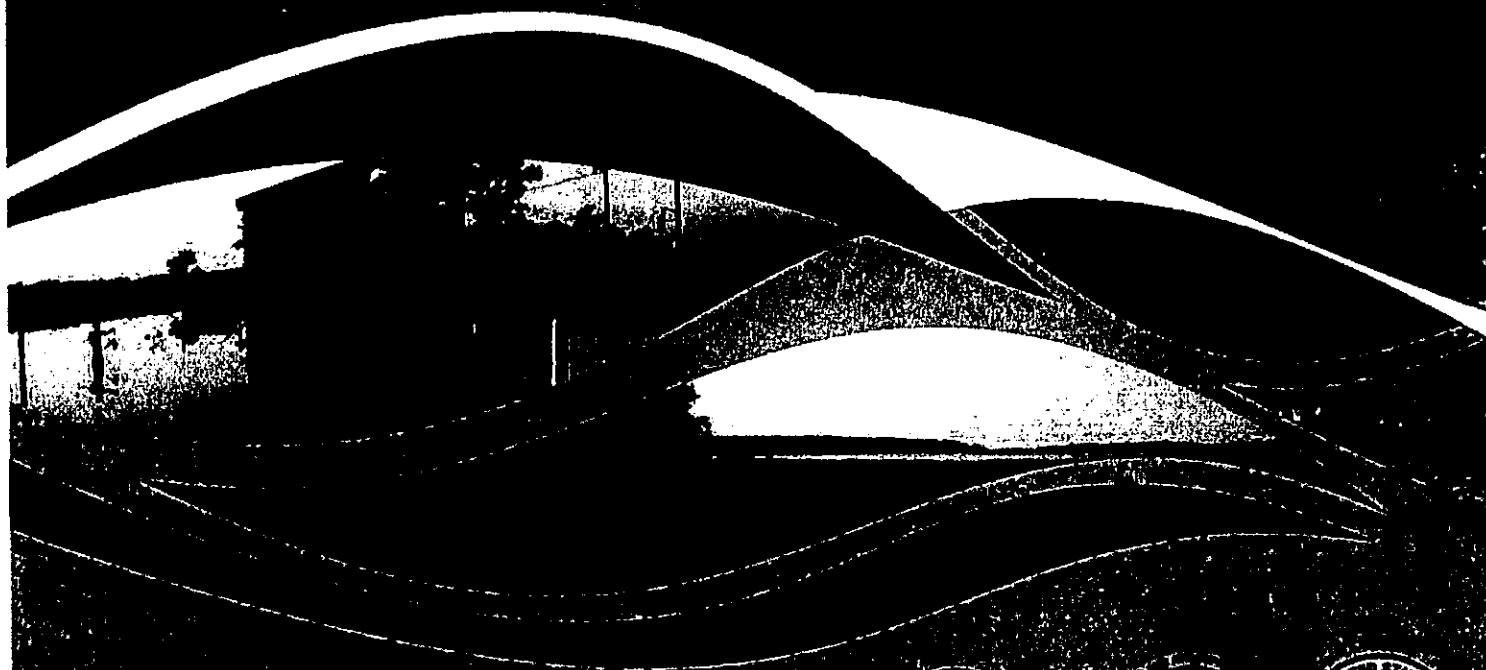
WATER QUALITY VOLUME PROVIDED	
FOREBAY	
ELEVATION (FT)	AREA
10	5,125 SF
11	6,797 SF
12	8,345 SF
13	9,193 SF
14	10,041 SF
15	10,889 SF
16	11,737 SF
17	12,585 SF
18	13,433 SF
19	14,281 SF
20	15,129 SF
21	15,977 SF
22	16,825 SF
23	17,673 SF
24	18,521 SF
25	19,369 SF
26	20,217 SF
27	21,065 SF
28	21,913 SF
29	22,761 SF
30	23,609 SF
31	24,457 SF
32	25,305 SF
33	26,153 SF
34	27,001 SF
35	27,849 SF
36	28,697 SF
37	29,545 SF
38	30,393 SF
39	31,241 SF
40	32,089 SF
41	32,937 SF
42	33,785 SF
43	34,633 SF
44	35,481 SF
45	36,329 SF
46	37,177 SF
47	38,025 SF
48	38,873 SF
49	39,721 SF
50	40,569 SF
51	41,417 SF
52	42,265 SF
53	43,113 SF
54	43,961 SF
55	44,809 SF
56	45,657 SF
57	46,505 SF
58	47,353 SF
59	48,201 SF
60	49,049 SF
61	49,897 SF
62	50,745 SF
63	51,593 SF
64	52,441 SF
65	53,289 SF
66	54,137 SF
67	54,985 SF
68	55,833 SF
69	56,681 SF
70	57,529 SF
71	58,377 SF
72	59,225 SF
73	60,073 SF
74	60,921 SF
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78	64,313 SF
79	65,161 SF
80	66,009 SF
81	66,857 SF
82	67,705 SF
83	68,553 SF
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106	88,057 SF
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113	93,993 SF
114	94,841 SF
115	95,689 SF
116	96,537 SF
117	97,385 SF
118	98,233 SF
119	99,081 SF
120	99,929 SF
121	100,777 SF
122	101,625 SF
123	102,473 SF
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175	146,569 SF
176	147,417 SF
177	148,265 SF
178	149,113 SF
179	149,961 SF
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198	166,073 SF
199	166,921 SF
200	167,769 SF
201	168,617 SF
202	169,465 SF
203	170,313 SF
204	171,161 SF
205	172,009 SF
206	172,857 SF
207	173,705 SF
208	174,553 SF
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211	177,097 SF
212	177,945 SF
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218	183,033 SF
219	183,881 SF
220	184,729 SF
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222	186,425 SF
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225	188,969 SF
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254	213,561 SF
255	214,409 SF
256	215,257 SF
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258	216,953 SF
259	217,801 SF
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268	225,433 SF
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270	227,129 SF
271	227,977 SF
272	228,825 SF
273	229,673 SF
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301	253,417 SF
302	254,265 SF
303	255,113 SF
304	255,961 SF
305	256,809 SF
306	257,657 SF
307	258,505 SF
308	259,353 SF
309	260,201 SF
310	261,049 SF
311	261,897 SF
312	262,745 SF
313	263,593 SF
314	264,441 SF
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316	266,137 SF
317	266,985 SF
318	267,833 SF
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320	269,529 SF
321	270,377 SF
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329	277,161 SF
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347	292,425 SF
348	293,273 SF
349	294,121 SF
350	294,969 SF
351	295,817 SF
352	296,665 SF
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373	313,473 SF
374	314,321 SF
375	315,169 SF
376	316,017 SF
377	316,865 SF
378	317,713 SF
379	318,561 SF
380	319,409 SF
381	320,257 SF
382	321,105 SF
383	321,953 SF
384	322,801 SF
385	323,649 SF
386	324,497 SF
387	325,345 SF
388	326,193 SF
389	327,041 SF
390	327,889 SF
391	328,737 SF
392	329,585 SF
393	330,433 SF
394	331,281 SF
395	332,129 SF
396	332,977 SF
397	333,825 SF
398	334,673 SF
399	335,521 SF
400	336,369 SF
401	337,217 SF
402	338,065 SF
403	338,913 SF
404	339,761 SF
405	340,609 SF
406	341,457 SF
407	342,305 SF
408	343,153 SF
409	344,001 SF
410	344,849 SF
411	345,697 SF
412	346,545 SF
413	347,393 SF
414	348,241 SF
415	349,089 SF
416	349,937 SF
417	350,785 SF
418	351,633 SF
419	352,481 SF
420	353,329 SF
421	354,177 SF
422	355,025 SF
423	355,873 SF
424	356,721 SF
425	357,569 SF
426	358,417 SF
427	359,265 SF
428	360,113 SF
429	360,961 SF
430	361,809 SF
431	362,657 SF
432	363,505 SF
433	364,353 SF
434	365,201 SF
435	366,049 SF
436	366,897 SF
437	367,745 SF
438	368,593 SF
439	369,441 SF
440	370,289 SF
441	371,137 SF
442	371,985 SF
443	372,833 SF
444	373,681 SF
445	374,529 SF
446	375,377 SF
447	376,225 SF
448	377,073 SF
449	377,921 SF
450	378,769 SF
451	379,617 SF
452	380,465 SF
453	381,313 SF
454	382,161 SF



# Maryland Department of Natural Resources' Chesapeake and Coastal



## Public Comment Solicitation



The Chesapeake and Coastal Program is a  
collaborative effort between Maryland's  
Department of Natural Resources and the  
Chesapeake Bay Foundation to protect and  
restore the Chesapeake Bay and its  
surrounding communities and ecosystems.



MARYLAND Department of Natural Resources  
Chesapeake Bay Foundation  
United States Department of the Interior  
United States Fish and Wildlife Service

**The Department of Natural Resources'  
Chesapeake and Coastal Grants Gateway**

Maryland's Chesapeake and Coastal Grants Gateway (Grants Gateway) was created to streamline the grant application process for government and non-governmental organizations as well as academic institutions. Grants Gateway provides a one-stop location for partners seeking technical and financial support for projects that foster healthy ecosystems, communities, and economies that are resilient in the face of change.

Maryland's communities are faced with a future of higher intensity storms, increased populations and development, changing sea levels and flooding, and a growing demand for healthy places for tourism and recreation. These trends make the already challenging task of restoring the Chesapeake Bay, safeguarding people and infrastructure and managing natural resources even more complex.

To assist Maryland's communities, the department will provide a single point of entry through the Grants Gateway for organizations seeking technical and financial assistance to restore local waterways, increase their resilience to climate impacts, strengthen local economies and develop the next generation of environmental stewards.

Grants are made possible with funding through the Chesapeake and Atlantic Coastal Bays Trust Fund, the Coastal Resiliency Program, the Waterway Improvement Fund, the National Oceanic and Atmospheric Administration and the Environmental Protection Agency's Chesapeake Bay Program. Through the improved connections across grant programs, the department seeks to support more comprehensive and integrated projects that achieve *(at least one of)* the following outcomes:

**Outcome 1** - Accelerate recovery and restoration of natural resources by implementing non-point source pollution reduction projects.

**Outcome 2** - Enhance capacity to understand and effectively plan to address flood risks associated with a changing climate.

**Outcome 3** - Utilize natural and nature-based infrastructure to enhance resilience to climate change.

**Outcome 4** - Improve student ability to take action benefiting Chesapeake and coastal ecosystems through outdoor learning and stewardship.

**Outcome 5** - Foster sustainable development and use of Maryland waterways with projects that benefit the general boating public. *(Expected Summer 2020).*

## **Outcomes**

Project proposals must be submitted under only one of the following five outcomes. To ensure the best possible proposals the department recommends that applicants contact the respective outcome contact to discuss their project ideas and arrange a field visit (if applicable) prior to developing and submitting an application. As of November 2019, the department's voicemail system is not working. Please use the Site Visit / Proposal Discussion Form and a representative will contact you or use the outcome contact email as the best method of communication. We apologize for any inconvenience.

### **Outcome 1 – Accelerate recovery and restoration of natural resources by implementing non-point source pollution reduction projects.**

Government-affiliated and non-governmental organizations with implementation-ready restoration projects can submit proposals under this outcome. Projects must address water quality to the mainstem of the Chesapeake Bay or Atlantic Coastal Bays by reducing non-point source pollution, namely nitrogen, phosphorus and sediment. Projects should be cost-effective, located in targeted areas, and implementation-ready. Projects that maximize the restoration opportunity by incorporating habitat and enhancing resiliency to increased precipitation events will be given priority; this includes a robust riparian buffer for stream restoration projects.

**New for FY2021:** The technical review will prioritize riparian forest buffer opportunities. Large-scale, contiguous riparian forest buffer projects that maximize forest plantings within the width (35 ft minimum) and length of the riparian zone are highly desirable. This grant is not intended to replace existing cost-share opportunities on private land (i.e. CREP).

There is a suggested minimum request of \$500,000 for this outcome (if your project is under \$500,000 please discuss with the outcome contact). Proposed projects should demonstrate ability to construct within 12 months of award. We encourage applicants to contact DNR Chesapeake and Coastal Service (CCS) to discuss their project(s). To arrange a site visit, please fill out the request form and a CCS project manager will contact you: Site Visit Request Form

**Selection criteria include:**

- **Geographic Targeting:** To view the targeting map visit: <http://bit.ly/targetingmap>
- **Cost-Efficiency:** Defined as the state cost per pound of nutrients and sediment reduced. Leveraged funds help to reduce the overall cost of the project to the state, thus increasing cost-efficiency.

**FY2020 solicitation average state cost per pound of funded projects:**

	<b>Nitrogen</b>	<b>Phosphorus</b>	<b>Suspended Solids</b>
<b>Annual</b>	\$2,500 / lb	\$25,520 / lb	\$53,400 / ton (\$26.70 / lb)
<b>15 Yr Lifespan</b>	\$167 / lb	\$1,701 / lb	\$3,560 / ton (\$1.78 / lb)

- Readiness and ability to proceed

**Required attachments:**

- **For Projects on Private Lands:** Landowner agreement(s)
- **For Non-governmental Applicants:** Letter of support from a local government representative; landowner agreement as necessary
- **FieldDoc nutrient and sediment reductions**
  - FieldDoc.org is required to estimate nitrogen, phosphorus and sediment reductions. The land use loading rates and BMP effectiveness estimates within FieldDoc are consistent with Bay Program protocols and Municipal Separate Sewer System (MS4) nutrient and sediment reduction calculations and must be used to calculate reductions for your proposal submission. **Any proposal that does not include calculations from FieldDoc will not be considered.**
- Current designs
- Letters of support from committed partners
- Photographs of current conditions

**Outcome Contact:** Gabe Cohee

Maryland Department of Natural Resources

Chesapeake and Coastal Service

(p) 410.260.8753 | (e) [gabe.cohee@maryland.gov](mailto:gabe.cohee@maryland.gov)

**Outcome 2 – Enhance capacity to understand and effectively plan to address flood risks associated with a changing climate.**

Local governments seeking to improve understanding of potential impacts and vulnerabilities associated with flooding from rising waters and increased precipitation events are encouraged to submit a proposal. Communities should address both short (1-10 years) and long (+10 years) term flood impacts. Proposed projects can support communities conducting risk assessments and incorporating adaptation strategies into current planning processes. Project outcomes should result in higher regulatory standards and risk-reduction strategies. When addressing future impacts to tidal waters, applicants should utilize the 2018 Sea Level Rise Projections for Maryland. Projects addressing precipitation-induced flooding should be consistent with the trends described in the Northeast chapter of the Fourth National Climate Assessment. Proposals may request up to \$75,000 of funding for projects that will be a maximum of one year in duration.

**Examples of projects may include:**

- Assess flood hazards and the existing stormwater infrastructure to identify system improvements, including green infrastructure approaches, to reduce flood risk.
- Assess or evaluate impacted infrastructure (built or natural) with the intent to address current and anticipated flood impacts.
- Evaluate how flood risks may be impacted by projected changes in precipitation patterns.
- Assess vulnerability of natural resources, recreational and public access and built infrastructure to nuisance or high-tide flooding and future impacts under the 2018 MD Climate Change Commission Sea Level Rise Projections.
- Update and adopt planning processes such as small area flood mitigation plans, critical areas plans, floodplain ordinances, building codes, zoning ordinances and/or long-term plans.
- Develop or integrate a green infrastructure plan to address coastal, stormwater or floodplain hazards.
- Maintain membership in, or apply to, FEMA's Community Rating System (CRS).

**To discuss project ideas, please fill out the request form and a CCS project manager will contact you: Proposal Discussion Request Form**

**Selection criteria Includes:**

- Demonstrated program change. A program change is a change in local programs, policies or decisions that reduce vulnerability to flood impacts.
- Readiness and ability to proceed
- Demonstrated connection between proposed outcomes and adaptation to identified current and/or future flood risk

**Required attachments:**

- Letters of support from county or town council, town administrator, county executive, or appropriate decision-making body

Outcome Contact: Sasha Land

Maryland Department of Natural Resources

Chesapeake and Coastal Service

(p) 410.260.8718 | (e) sasha.land@maryland.gov

**Outcome 3 – Utilize natural and nature-based infrastructure to enhance resilience to climate change.**

Local governments and non-profit organizations can submit proposals under this outcome to design, engineer and implement projects that restore, create, and strengthen natural infrastructure to enhance community resilience to flooding, erosion, and sea level rise.

Proposed resiliency projects must be nature-based and provide risk-reduction and community-wide benefits. Proposals must state how the project will address climate-related impacts in the short term (1-10 years) and long term (+10 years) based on the life expectancy of the proposed project. The 2018 Sea Level Rise Projections for Maryland should be integrated into the design as applicable. Projects addressing precipitation-induced flooding should be consistent with the trends described in the Northeast chapter of the Fourth National Climate Assessment.



The department encourages proposals that implement recommendations outlined in state or local planning documents; incorporate community conversations; involve community/citizen science; address environmental justice needs; address multiple climate hazards; and address other co-benefits such as water quality, habitat resiliency, public access, and beneficial use of dredged material. Proposals may request design/permitting, design-build or construction funding, with a maximum of \$100,000 for the design/permit phase. Design projects will be a maximum of 24 months in duration and construction projects a maximum of 12 months in duration. Design projects with identified local partnerships and matching funds will be prioritized. Applicants may have the opportunity to work with CCS towards construction after permits are obtained. Applicants proposing construction projects must describe how the existing design addresses climate change, provides risk reduction and community-wide benefits, and incorporates the 2018 Sea Level Rise Projections for Maryland, precipitation trends described in the Northeast chapter of the Fourth National Climate Assessment, or other relevant projections as applicable.

**Contact the outcome contact to discuss project ideas. To arrange a site visit, please fill out the request form and a CCS project manager will contact you: Site Visit Request Form**

**Examples of projects may include:**

- Design and construction of a green infrastructure practice that will address previously-determined stormwater risks anticipated due to climate change.
- Design and construction of an innovative coastal resilience project that will restore or enhance natural features (such as high and low marsh, dunes, coastal forest buffer, and near-shore habitats) while protecting critical infrastructure from future sea level rise.
- Design and construction of a nature-based coastal resilience project that addresses coastal and non-coastal flooding in an environmental justice community.
- Design and construction of a living shoreline that utilizes local dredged material while protecting public lands that buffer coastal economies.

**Selection criteria includes:**

- Protection of critical or community infrastructure from climate change impacts using nature-based solutions. Projects will be screened through Maryland's Coastal Resiliency Assessment to evaluate alignment with statewide priorities.

- Community-wide benefit with engagement opportunities
- Demonstrate connection to local hazard mitigation, nuisance flooding, green infrastructure or climate adaptation plan
- Readiness and ability to proceed
  - Cost efficiency: Leveraged funds up to a 1:1 match help to reduce the overall cost of the project to the state.

**Required attachments:**

- **For Projects on Private Lands:** Landowner agreement(s)
- **For Non-profit Applicants:** Letter of support from a local government representative (i.e. county or town council, town administrator, county planning office, county executive); landowner agreement(s) as necessary
- Current designs (if applicable)
- Photographs of current conditions

Outcome Contact: Nicole Carlozo  
 Maryland Department of Natural Resources  
 Chesapeake and Coastal Service  
 580 Taylor Ave., E-2  
 Annapolis, MD 21401  
 (p) 410.260.8726 | (e) nicole.carlozo@maryland.gov

**Outcome 4 – Improve student ability to take actions benefiting Chesapeake and coastal ecosystems through outdoor learning and stewardship.**

This opportunity is offered primarily to support outdoor learning field investigations on public lands, and related student stewardship activities, for students in pre-Kindergarten through grade 12, as part of comprehensive Meaningful Watershed Educational Experiences (MWEEs) that contribute to school environmental literacy programs. Projects **must** involve students in extended learning that includes outdoor experiences and leads to stewardship projects. For this opportunity, public lands include primarily state-managed properties such as state parks, estuarine research reserves, designated natural areas, state forests, trails, water trails, etc.; or may include Federal facilities such as National Parks, National Wildlife Refuges, etc.; or local, county or municipal parks offering opportunities to explore and study nature and natural

systems. Eligible costs necessary to bring outdoor learning and stewardship to fruition may include transportation and facility fees, teacher professional development, or supplies for field investigations and stewardship projects. Stewardship activities may take place at school, in the surrounding community, or elsewhere as appropriate to the program's content.

School systems (districts) and partners working with schools are encouraged to apply under this outcome. Partners may include local or state agencies, nonprofit entities such as environmental organizations or outdoor schools. Proposals are preferably for systemic district-wide programs and can support schools that are fully ready to implement their MWEEs but are lacking funding resources for the stated costs associated with outdoor experiences and/or stewardship; or school districts that need more help in planning and implementing quality, sustained student experiences as part of their local curriculum. There is a preferred minimum request of \$25,000 up to a maximum of \$100,000 (those with projects less than \$25,000 are encouraged to arrange a discussion with the outcome contact listed here, to determine if the project may be eligible). Funds may be used for the 2019-2020 or 2020-2021 school years, and summer of 2020 for planning and teacher preparation. Funds should serve as many students as possible.

**To discuss project ideas, please fill out the request form and a CCS project manager will contact you: [Proposal Discussion Request Form](#)**

**Selection criteria includes:**

- Funds will be used to provide transportation to public lands for student watershed investigations as part of comprehensive Meaningful Watershed Educational Experiences (MWEEs), ideally supporting students in low-income communities, such as Title I schools, or communities where access to public lands is severely limited.
- The proposal demonstrates support for and contribution to environmental literacy priorities with a MWEE focus, for programs that have begun being implemented or are currently under development.
- The program aims to use funds cost-effectively to reach all students (or as many as feasible) within a given grade throughout a school system (systemically).
- The proposal requests funding for or demonstrates that programmatic supports are in place, for example, the program is embedded in required curriculum, professional development for teachers will be provided, school administration is engaged, environmental education partners are on board to provide assistance, etc.
- Ability to undertake and sustain the proposed work.

**Required attachments:**

- Letter(s) of support from the school system(s) superintendent(s)
- Environmental Literacy Plan or other evidence of environmental literacy program (curriculum alignment, Meaningful Watershed Educational Experience plan, etc.)

**Additional guidance details for Outcome 4 are provided [here](#). Please review these guidelines before beginning the application.**

Outcome Contact: Jennifer Wolfe

Maryland Department of Natural Resources

Chesapeake and Coastal Service

(p) 410.260.8988 | (e) [Jennifer.wolfe1@maryland.gov](mailto:Jennifer.wolfe1@maryland.gov)

**Outcome 5 – Foster sustainable development and use of Maryland waterways with projects that benefit the general boating public. (*Expected Summer 2020*)**

## **Submitting a Proposal**

Additional submission resources and information can be found at

<http://dnr.maryland.gov/ccs/Pages/funding/grantsgateway.aspx>. This includes a sample landowner agreement, outcome form questions and other useful resources.

### **Eligible Applicants for all Outcomes**

Government-affiliated: Local and state government agencies and affiliates, including local school systems and park services, are eligible to propose projects under all outcomes.

Applications must be submitted by a representative of a local government and the government entity must be the funding recipient if selected.

Non-Governmental Organizations: (*Not eligible for Outcome 2*) Non-profit organizations that are registered, in compliance and in good standing with the Maryland Secretary of State are eligible to propose projects. This includes Institutions of Higher Education.

Individual private or commercial landowners, consultants, contractors, and other for-profit entities with demonstrated restoration experience are encouraged to apply in partnership with an eligible entity identified above.

### **Submission Guidelines**

All applications must be submitted through CCS's Grants Gateway:

[https://webportalapp.com/sp/grants\\_gateway](https://webportalapp.com/sp/grants_gateway). Applications CANNOT be mailed, faxed or submitted in person. If this is your first time submitting a proposal, you will first need to visit the website and sign up by clicking on "Sign Up." Please store your username and password in a secure location for later reference. Your username and password will be used to submit online reports if your project is selected and to submit future proposals.

### **Grants Gateway Application:**

After creating your profile, use the "Get Started" button on the Home page to begin your application. There are three phases to complete your Application:

- **Common Application:** general details about your proposal
- **Project Details:** site and task specific details
- **Budget:** funding requested and leveraged/match fund details. **Note:** you will be asked to download a "Budget Template" that you will fill out and upload when complete. The template includes space for notes to explain or justify line items in your budget. There are no match or leveraged funds required; however, demonstrating matched and leveraged funds may help in the competitiveness of your proposal.

Fill out the appropriate information and follow the instructions for each subsequent step in the process. There is no additional narrative requirement for the application outside of the form-based responses. Please direct any questions about your applications to the appropriate outcome contact, listed above. All submissions require a transmittal letter on official letterhead that is signed by an executive who is authorized to request funding on behalf of the applicant organization. Form questions can be reviewed and printed for planning purposes on the Grants Gateway website: <http://dnr.maryland.gov/ccs/Pages/funding/grantsgateway.aspx>



## Selection Process

Each project proposal will receive an initial screening by CCS to ensure the application meets basic eligibility criteria. CCS staff may follow up with applicants to discuss the projects further. Eligible proposals will then be evaluated by an inter-agency review team based on criteria identified in the Outcomes above. After review, if awarded, CCS staff will work with selected candidates to complete the final scope of work for the project and discuss timing needs to ensure project outcomes are met on time.

## Deadline

The proposals will be due to the Department of Natural Resources by 11:59 p.m. on Friday February 14, 2020 through the CCS web-based grants management portal at: [https://webportalapp.com/sp/grants\\_gateway](https://webportalapp.com/sp/grants_gateway).

## Awards

Funding will be made available on a competitive basis. Awards will be subject to the contractual and/or grant agreement conditions. **Unless otherwise authorized by the Department of Natural Resources (DNR), all payments to grantees will be made on a reimbursable basis.**

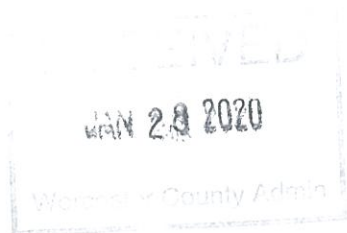
## Solicitation Schedule

The anticipated schedule for is as follows:

Solicitation Issued	November 2019
Technical Assistance/Site Visits ( <i>as requested</i> )	November 2019 – February 2020
<b>Grants Gateway Application due</b>	<b>February 14, 2020</b>
Technical Review and Evaluation	February 2020 - March 2020
Project Selection	April 2020 - May 2020
Project Funding Available	July 1, 2020

## Cancellation of the solicitation

The state reserves the right to cancel this solicitation at any time.




10

**Worcester County**  
Department of Environmental Programs

Memorandum

**To:** Harold L. Higgins, Chief Administrative Officer

**From:** Robert J. Mitchell, LEHS   
Director, Environmental Programs

**Subject:** **Coastal Bays Watershed Plan**  
Assawoman Bay Subwatershed Plan

FYI  
-Detailed presentation at  
Future meeting

**Date:** January 27, 2020

Environmental Programs has been working diligently for some time with our contractor (the Center for Watershed Protection) and our partners (Maryland Coastal Bays Program, Towns of Berlin and Ocean City, MD Department of Agriculture, Worcester County Soil Conservation District, National Park Service and others) in the gathering of the baseline data and best management practices installed and implemented by Worcester County and our partners since the baseline year (2004). This has been an exhaustive process to both work with the Center and our partners in assembling, locating, verifying, and tracking these practices so a baseline can be prepared as the foundation this plan can start from in our path to watershed restoration.

This plan is structured to follow the nine elements for watershed planning known as the "a-i criteria" (attached) that were established by the U.S. Environmental Protection Agency (USEPA) to address non-point source management measures. This criteria is required information that must be included our watershed-based plans to restore waters impaired by nonpoint source pollution if Worcester County and our partners desire to utilize Section 319 funds in our restoration efforts. Section 319 funds are defined under the Federal Clean Water Act Section §319(h), and grant funds are available to reduce or eliminate water quality impairments that are associated with nonpoint source pollution. In Maryland, this grant program is administered by the Maryland Department of the Environment (MDE).

This watershed-based plan for Assawoman Bay is focused on meeting the nonpoint source TMDL load reductions from the Maryland portion of the Coastal Bays watersheds, although additional loads may come from areas outside of Maryland. That is being addressed with interagency agreements between the state environmental agencies of Maryland and Delaware and supervised

**Citizens and Government Working Together**

la

by USEPA. The primary nonpoint sources of pollution in the Maryland Coastal Bays watersheds include runoff from urban, agricultural and forest/barren land, on-site wastewater disposal systems (also known as septic systems), atmospheric deposition, and shoreline erosion. These plans are used as the basis for planning future restoration projects to meet the nutrient reductions in the established Total Maximum Daily Limit (TMDL) for the Coastal Bays in its sub-watersheds. TMDLs are sometimes referred to as a "pollution diet".

The original grant funding and supplemental, pass-through funding from the Maryland Coastal Bays Program were to be used to prepare a baseline for all the Coastal Bays subwatersheds and proceed with a specific plan for one or more of these subwatersheds. That task is finished and the first such subwatershed completed is Assawoman Bay.

We have recently received word that both MDE and USEPA have approved this specific subwatershed plan as meeting the required elements, which would entitle the county and our partners the ability to apply for Section 319 funding opportunities for restoration practices within the watershed.

We have attached the prepared Assawoman Bay Subwatershed Plan for your review. We would appreciate the opportunity similarly distribute this plan to the County Commissioners so that they may review the actual plan ahead of a future meeting where we will detail the specifics, present the impairments, solutions, and opportunities with a short power point presentation, and take questions and address any concerns from the Board on this plan.

If you have any questions or need any additional information please let me know. Both Ms. Munson and I will be available to discuss this request with you and the County Commissioners at your convenience.

#### Attachments

cc: Katherine Munson  
David Bradford



## DEPARTMENT OF ENVIRONMENTAL PROGRAMS

### USEPA "a thru i" Criteria

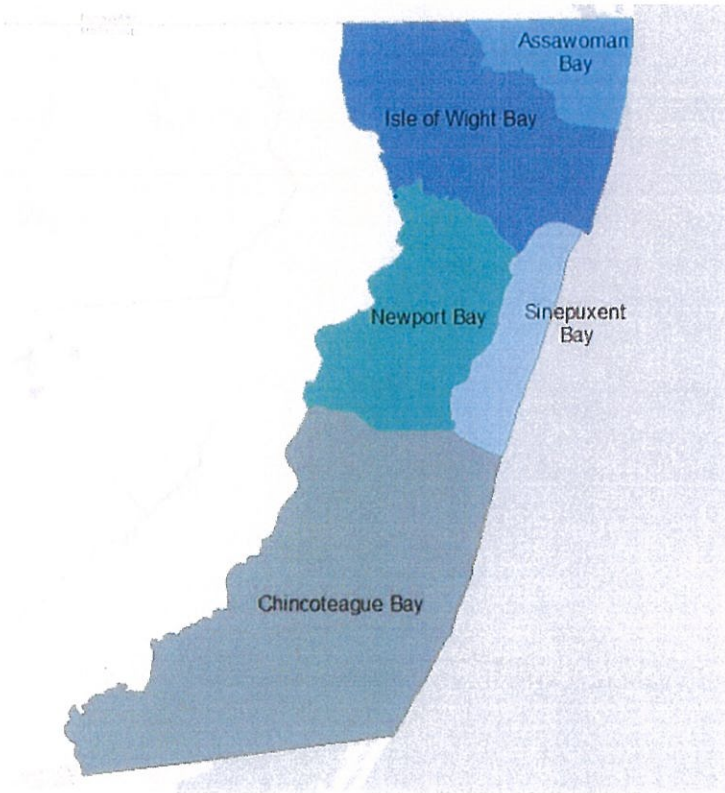
- 1. An identification of the causes and sources** or groups of similar sources that will need to be controlled to achieve the load reductions estimated in this watershed-based plan (and to achieve any other watershed goals identified in the watershed-based plan), as discussed in item (b) immediately below. Sources that need to be controlled should be identified at the significant subcategory level with estimates of the extent to which they are present in the watershed (e.g., X number of dairy cattle feedlots needing upgrading, including a rough estimate of the number of cattle per facility; Y acres of row crops needing improved nutrient management or sediment control; or Z linear miles of eroded streambank needing remediation).
- 2. An estimate of the load reductions expected** for the management measures described under paragraph (c) below (recognizing the natural variability and the difficulty in precisely predicting the performance of management measures over time). Estimates should be provided at the same level as in item (a) above (e.g., the total load reduction expected for dairy cattle feedlots; row crops; or eroded streambanks).
- 3. A description of the Non-Point Source (NPS) management measures** that will need to be implemented to achieve the load reductions estimated under paragraph (b) above (as well as to achieve other watershed goals identified in this watershed-based plan), and an identification (using a map or a description) of the critical areas in which those measures will be needed to implement this plan.
- 4. An estimate of the amounts of technical and financial assistance needed**, associated costs, and/or the sources and authorities that will be relied upon, to implement this plan. As sources of funding, States should consider the use of their Section 319 programs, State Revolving Funds, USDA's Environmental Quality Incentives Program and Conservation Reserve Program, and other relevant Federal, State, local and private funds that may be available to assist in implementing this plan.
- 5. An information/education component** that will be used to enhance public understanding of the project and encourage their early and continued participation in selecting, designing, and implementing the NPS management measures that will be implemented. NPS management measures identified in this plan that is reasonably expeditious.
- 6. A schedule for implementing the NPS management measures** identified in this plan that is reasonably expeditious.
- 7. A description of interim, measurable milestones** for determining whether NPS management measures or other control actions are being implemented.
- 8. A set of criteria that can be used to determine whether loading reductions are being achieved** over time and substantial progress is being made towards attaining water quality standards and, if not, the criteria for determining whether this watershed-based plan needs



# Maryland Coastal Bays Watershed Plan

## Including Assawoman Bay “a - i” Subwatershed Plan

*September 2019*



CENTER FOR  
WATERSHED  
PROTECTION

Prepared by the Center for Watershed Protection  
3290 North Ridge Road, Suite 290  
Ellicott City, MD 21043



Prepared for Worcester County Maryland Department of Environmental Programs  
1 West Market St, Suite 1306  
Worcester County Government Center  
Snow Hill, MD 21863



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## Executive Summary

The Coastal Bays are a shallow coastal lagoon system located on the eastern side of the Delmarva (Delaware-Maryland-Virginia) Peninsula and comprised of five individual waterbodies: Assawoman Bay, Isle of Wight Bay (including the St. Martin's River), Sinepuxent Bay, Newport Bay and Chincoteague Bay. In 2014, the Maryland Department of the Environment (MDE) issued a nitrogen and phosphorus total maximum daily load (TMDL) for Assawoman Bay, Isle of Wight Bay, Sinepuxent Bay, Newport Bay and Chincoteague Bay in Worcester County, Maryland. Phosphorus and sediment TMDLs were issued for the Big Mill Pond watershed in Chincoteague Bay in 2002. In total, the approved nutrient and sediment TMDLs address 17 impairments (including the Bays themselves and several tributaries) within the Maryland portion of the Coastal Bays watersheds.

This watershed-based plan is focused on meeting the nonpoint source TMDL load reductions from the Maryland portion of the Coastal Bays watersheds, although additional loads may come from areas outside of Maryland. The primary nonpoint sources of pollution in the Maryland Coastal Bays watersheds include runoff from urban, agricultural and forest/barren land, on-site wastewater disposal systems (also known as septic systems), atmospheric deposition, and shoreline erosion. This plan is structured to follow the nine elements for watershed planning known as the "a-i criteria" that were established by the U.S. Environmental Protection Agency (USEPA) guidance (EPA, 2008) to address non-point source management measures.

The baseline year for the Coastal Bays TMDL is 2004 and the baseline year for the Big Mill Pond TMDL is 2001. Therefore, management measures installed since these baseline years were identified and accounted for in this plan. This includes agricultural BMPs reported by Maryland Department of Agriculture, urban BMPs (e.g., stormwater retrofits, storm drain cleanouts) from a variety of sources, other BMPs such as stream and wetland restoration, shoreline/riparian projects, and septic upgrades and connections. The nutrient (and sediment for Big Mill Pond) load reductions associated with these management measures were calculated, primarily using documented crediting protocols from the Chesapeake Bay Program. Table ES-1 and Table ES-2 show the results and indicate the watersheds where existing BMPs have resulted in achievement of the required reductions.

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**Table ES-1. NPS Reductions Achieved with Existing BMPs: Nitrogen**

Tidal Basin	TMDL Watershed <sup>1</sup>	TN Reduction Required (lbs/yr)	TN Reduction Achieved (lbs/yr)	TN Reduction Achieved (%) <sup>2</sup>
Assawoman Bay	Assawoman Bay	10,448	5,061	48%
	Greys Creek	2,508	3,708	148%
Isle of Wight Bay	Isle of Wight Bay	127,858	29,220	23%
	Manklin Creek	6,802	820	12%
	Herring Creek	6,902	1,012	16%
	Turville Creek	12,545	4,989	40%
	St. Martin River	92,859	22,045	24%
	Bishopville Prong	25,439	6,625	26%
	Shingle Landing Prong	56,406	13,236	23%
Newport Bay	Newport Bay	28,409	23,088	81%
	Newport Creek	3,171	3,380	107%
	Marshall Creek	3,445	4,102	119%
	Ayer Creek/Kitts Branch	14,531	10,407	72%
Sinepuxent Bay	Sinepuxent Bay	2,212	8,470	383%
Chincoteague Bay	Chincoteague Bay	47,311	34,971	74%
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	N/A	N/A	N/A

<sup>1</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

<sup>2</sup> Green shaded cells indicate the load reduction goal has been met.

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**Table ES-2. NPS Reductions Achieved with Implemented BMPs: Phosphorus**

Tidal Basin	TMDL Watershed <sup>1</sup>	TP Reduction Required (lbs/yr)	TP Reduction Achieved (lbs/yr)	TP Reduction Achieved (%) <sup>2</sup>
Assawoman Bay	Assawoman Bay	0 lbs required	400	0 lbs required
	Greys Creek	0 lbs required	212	0 lbs required
Isle of Wight Bay	Isle of Wight Bay	5,515	1,108	20%
	Manklin Creek	499	14	3%
	Herring Creek	452	33	7%
	Turville Creek	653	48	7%
	St. Martin River	3,370	946	28%
	Bishopville Prong	205	300	146%
	Shingle Landing Prong	2,540	578	23%
Newport Bay	Newport Bay	1,322	874	66%
	Newport Creek	109	106	97%
	Marshall Creek	118	111	94%
	Ayer Creek/Kitts Branch	787	502	64%
Sinepuxent Bay	Sinepuxent Bay	0 lbs required	41.0	0 lbs required
Chincoteague Bay	Chincoteague Bay	1,740	1,043	60%
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	1,642	488	30%

<sup>1</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

<sup>2</sup> Green shaded cells indicate the load reduction goal has been met.

The estimated pollutant reductions from BMPs implemented since the TMDL baseline are not sufficient to meet the required reductions in many of the TMDL watersheds. A proposed plan to meet the remaining required nitrogen load reduction for Assawoman Bay, is summarized in Table ES-3 and includes a mix of reductions from septic, urban, agricultural, and stream/shoreline erosion sources. Table ES-3 also presents the estimated costs for implementing the management measures proposed in this plan for Assawoman Bay. The suite of proposed BMPs will be refined through discussion with watershed stakeholders and revised as more information is gathered on specific BMP opportunities, such as through the watershed assessment planned for Assawoman Bay in 2019-2020.



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**Table ES-3. Estimated Cost for BMP Implementation in Assawoman Bay**

BMP	Number of Units	Unit Value	Nitrogen Load Reduction (lbs/yr)	Total Annual Cost
<b>Agricultural BMPs</b>				
Soil Conservation and Water Quality Management Plans	86.5	acres	74	\$168
Core Nutrient Management Plans	54.26	acres	193	\$898
Other agricultural BMPs * Wetland creation/restoration * Filter strips/grassed waterways * Riparian forest/herbaceous cover * Roof runoff structures * Heavy use protection * Denitrifying ditch bioreactors	10	acres	1,084	\$4,199 <sup>1</sup>
<b>Urban BMPs</b>				
Stormwater retrofits/redevelopment BMPs * Bioretention/rain gardens * Infiltration practices * Permeable pavement * Bioswales	196	acres	1,535	\$844,162 <sup>1</sup>
<b>Other BMPs</b>				
Tree planting	20.5	acres	207	\$1,735
Riparian buffers	3	acres	30	\$276
Stream restoration	9707	feet	728	\$738,509
Shoreline restoration	7000	feet	333	\$199,150
<b>Septic Systems</b>				
Septic conversions	103	systems	1,203	\$54,265
<b>TOTAL</b>				<b>\$1,843,360</b>

<sup>1</sup> Composite cost using a variety of BMPs

This plan identifies funding sources and technical needs for Assawoman Bay, and an implementation schedule and milestones. It also includes a description of the information, education and public participation activities as well as monitoring activities to measure water quality improvements. Interim measures of success will include the extent of BMP implementation and estimates of the associated pollutant load reductions, which will be tracked using a spreadsheet tool to be developed by Worcester County and Maryland Coastal Bays Program. The County is committed to restoring its waters and implementing the actions outlined in this plan. Future iterations will identify future proposed BMPs whose associated pollutant load reductions will result in compliance with the TMDL requirements for additional watersheds.

## Introduction

This watershed-based plan provides information to address the nutrient and sediment total maximum daily loads (TMDLs) for the five watersheds (Assawoman Bay, Isle of Wight Bay (including the St. Martin's River), Sinepuxent Bay, Newport Bay and Chincoteague Bay) that collectively make up the "Maryland Coastal Bays watersheds" in Worcester County, Maryland. There are 16 waterbodies in total with approved TMDLs for nutrients and/or sediment in the Coastal Bays watersheds. The TMDLs provide a baseline or starting point for the required nutrient and sediment reductions, and also provides a good starting point for the watershed plan. The plan is focused on meeting the portion of the nonpoint source TMDL load reductions from the Maryland portion of the Coastal Bays watersheds, although additional loads may come from areas outside of Maryland.

This watershed plan is structured to follow the nine elements for watershed planning known as the "a-i criteria" that were established by the U.S. Environmental Protection Agency (USEPA) guidance in 2003 to address non-point source management measures. Although this plan primarily focuses on establishing strategies for reducing pollutant loads from nonpoint sources, it also documents reductions achieved (or planned) from point sources. The elements are identified below, along with a brief description of the information that each element provides. The section headings in this plan represent abbreviated statements of the nine elements and address each element in sequential order. The watershed plan is designed to address all the criteria in order to ensure that future implementation projects are eligible for Section 319(h) Nonpoint Source Program funding from the federal Clean Water Act. While the plan recommendations primarily address nonpoint source pollution, actions planned or already implemented to reduce nutrients from point sources in the watershed have also been documented here.

- a) An identification of the causes and sources, or groups of sources, that will need to be controlled to achieve the load reductions estimated in the watershed plan
- b) Estimates of pollutant load reductions expected through implementation of proposed nonpoint source (NPS) management measures
- c) A description of the NPS management measures that will need to be implemented
- d) An estimate of the amount of technical and financial assistance needed to implement the plan
- e) An information/education component that will be used to enhance public understanding and encourage participation
- f) A schedule for implementing the NPS management measures

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- g) A description of interim, measurable milestones for the NPS management measures
- h) A set of criteria to determine load reductions and track substantial progress towards attaining water quality standards
- i) A monitoring component to evaluate effectiveness of the implementation records over time

## Section A. Causes and Sources of Impairment

### Watershed Location and General Characterization

The Coastal Bays are a shallow coastal lagoon system located on the eastern side of the Delmarva (Delaware-Maryland-Virginia) Peninsula and comprised of five individual waterbodies: Assawoman Bay, Isle of Wight Bay (including the St. Martin's River), Sinepuxent Bay, Newport Bay and Chincoteague Bay. The Coastal Bays span three states, with the majority of the system being located in Worcester County, Maryland along with portions in Sussex County (Delaware), and Accomack County (Virginia). The Worcester County portion includes Ocean City, Assateague Island National Seashore, Ocean Pines and Berlin. Figure 1 shows the location of the Maryland portion of the Coastal Bays and their watersheds.

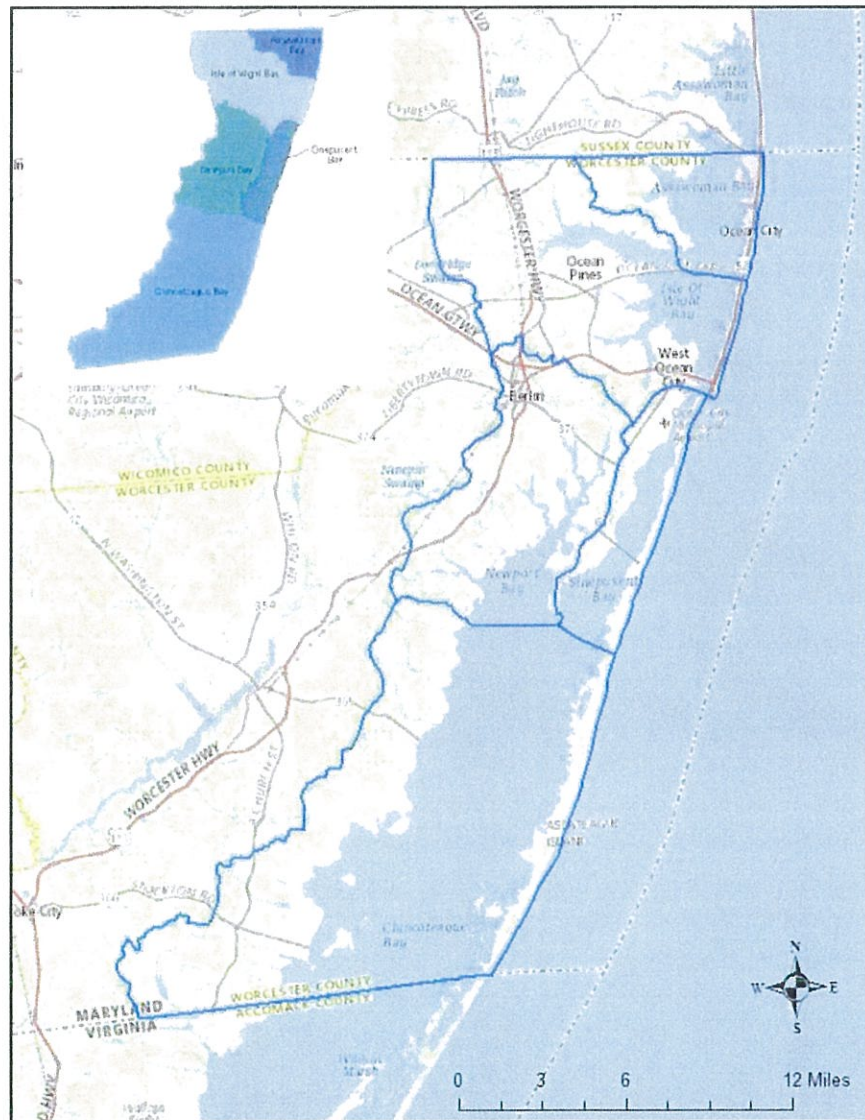


Figure 1. Maryland Coastal Bays Watershed Map

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Natural water depths in the Coastal Bays are generally less than eight feet, except for the main navigation channels around the inlets and the tidal range varies by location. The total watershed area (land area only) draining to the Coastal Bays from all three states (Delaware, Virginia, and Maryland) is 210,360 acres (851 square kilometers). Upstream watershed areas in Virginia and Delaware are approximately 89,920 acres or about 43% of the total watershed area.

### Water Quality Impairments and TMDLs

The designated use for all five Coastal Bays is Use II: *Support of Estuarine and Marine Aquatic Life and Shellfish Harvesting* (COMAR 26.08.02.08, No date). The Maryland Department of the Environment (MDE) has identified the waters of the Maryland Coastal Bays on the *Integrated Report of Surface Water Quality* as impaired by nutrients nitrogen and phosphorus (MDE, 2018). These areas were identified as impaired by nutrients based on high levels of chlorophyll a and low concentrations of dissolved oxygen. In addition to the nutrient impairments, Big Mill Pond, a sub-drainage area of Chincoteague Bay, is impaired by sediment. Table 1 summarizes the Coastal Bays water quality impairments.

Table 1. Water Quality Impairments for the Maryland Coastal Bays (MDE, 2018)				
Year listed	Basin	Basin Code	Specific Area	Identified Pollutant
1996	Assawoman Bay	2130102	Open water	Nitrogen
				Phosphorus
			Grey's Creek	Nitrogen
				Phosphorus
1996	Isle of Wight Bay	2130103	Turville Creek	Nitrogen
				Phosphorus
			Manklin Creek	Nitrogen
				Phosphorus
			Herring Creek	Nitrogen
				Phosphorus
			Bishopville Prong	Nitrogen
				Phosphorus
			St. Martin River	Nitrogen
				Phosphorus
1996	Newport Bay	2130105	Shingle Landing Prong	Nitrogen
				Phosphorus
			Open Water	Nitrogen
				Phosphorus
			Newport Creek	Nitrogen
			Marshall Creek	Nitrogen
				Phosphorus
			Kitts Branch	Biochemical Oxygen Demand
			Ayer Creek	Nitrogen
			Newport Bay	Nitrogen



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**Table 1. Water Quality Impairments for the Maryland Coastal Bays (MDE, 2018)**

Year listed	Basin	Basin Code	Specific Area	Identified Pollutant
1996	Sinepuxent Bay	2130104	Sinepuxent Bay	Nitrogen
				Phosphorus
1996	Chincoteague Bay	2130106	Chincoteague Bay	Nitrogen
				Phosphorus
2002	Big Mill Pond	2130106	Chincoteague Bay	Phosphorus
				Sediment

Under Section 303(d)(1)(C) of the Clean Water Act, states must develop a TMDL for each impaired water quality limited segment on the Integrated Report of Surface Water Quality, taking into account seasonal variations and a protective margin of safety to account for uncertainty. A TMDL reflects the total pollutant loading for the pollutant of concern that the waterbody can receive and still meet water quality standards. Water quality standards include a designated use for each waterbody and the water quality criteria (i.e., narrative statements and/or numeric values) designed to protect that use.

Nitrogen and phosphorus TMDLs for areas within Maryland's Northern Coastal Bays were approved by the USEPA in 2002. Nitrogen and Biological Oxygen Demand (BOD) TMDLs for the Newport Bay watershed were approved by the USEPA in 2003. In August of 2014, new TMDLs for nitrogen and phosphorus were approved for the Worcester County, Maryland portion of the Coastal Bays Watersheds that supersede the previous nutrient TMDLs. Phosphorus and sediment TMDLs were approved for Big Mill Pond in Chincoteague Bay in April 2002.

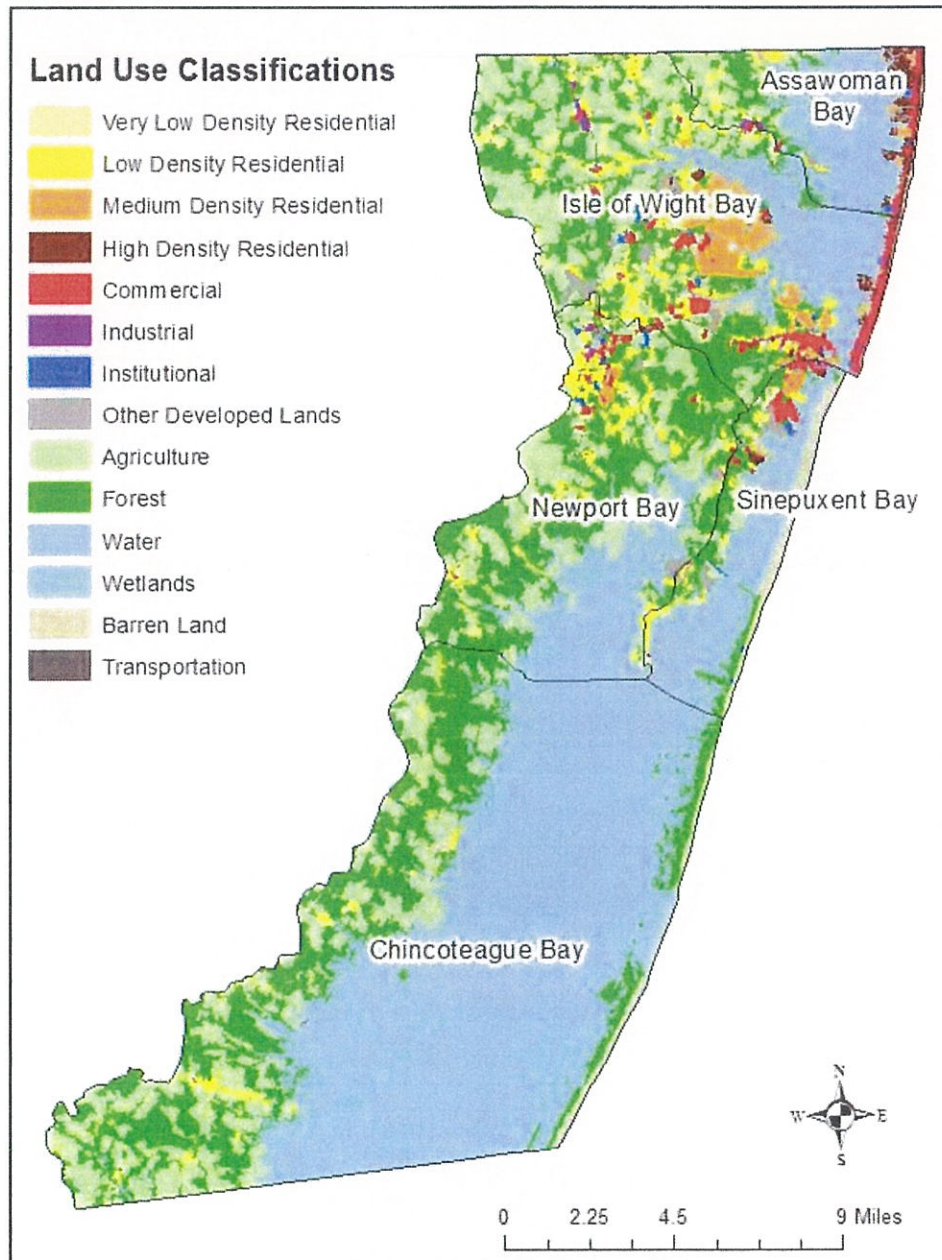
### Sources of Impairment

The sources of impairment in the Maryland Coastal Bays watersheds include both nonpoint sources and point sources. Nonpoint source pollution generally results from runoff from various types of precipitation moving across surfaces and then depositing into rivers, lakes, wetlands, coastal waters, and ground water. In general, natural lands like forest and wetlands tend to yield relatively low levels of nitrogen and phosphorus to surface waters, compared to lands that are dedicated to uses such as urban and agricultural land. This plan focuses on the nonpoint sources of pollution in the Maryland Coastal Bays watersheds, which include runoff from urban, agricultural and forest/barren land, on-site wastewater disposal systems (also known as septic systems), atmospheric deposition, and shoreline erosion. A description of point sources of nutrient pollution and point source BMPs implemented in the Coastal Bays watersheds is provided in Appendix A.

#### *Runoff from Urban, Agricultural and Forest/Barren Land*

Runoff from urban and agricultural lands contribute significantly to nonpoint source pollution. Urban lands can include residential, commercial, industrial, and institutional areas as well as the road surfaces in those lands. These land uses can contribute pollution from fertilizer, and pet waste, as well as fluids and emissions from vehicles and discharges from on-site sewage disposal systems. Agricultural lands are those used for

growing crops, animal production and can include areas that are used for other purposes such as pasture and nurseries. These lands can contribute pollution from fertilizers, animal waste, and air emissions. Land uses in the Maryland portion of the Coastal Bays watershed are primarily forest and other herbaceous growth (22% of the total watershed area); mixed agriculture (15%); water features (10%); urban land (8%), and barren or beaches (2%). Figure 2 illustrates the overall land use breakdown by category from 2010 (MDP, 2010) while Table 2 presents the acres of each land use (from MDE, 2014 and MDE, 2002).



**Figure 2. Land Use in the MD Coastal Bays Watershed**  
(Data Sources; MDP, Worcester County, ESRI)

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**Table 2. Coastal Bays Watershed Drainage Areas and Land Uses**

Tidal Basin	TMDL Watershed <sup>1</sup>	Total Drainage Area (Acres)	Upstream Drainage <sup>2</sup>	Agriculture	Urban	Water/ Wetland	Forest and Barren
Assawoman Bay	Assawoman Bay	31,618	24,909 <sup>3</sup>	1,403	1,993	1,477	1,835
	Greys Creek	10,372	6,667	1,365	426	465	1,379
Isle of Wight Bay	Isle of Wight Bay	41,071	6,475	10,321	8,339	2,654	13,282
	Manklin Creek	2,543	0	149	1,158	216	1,020
	Herring Creek	3,433	0	407	762	397	1,867
	Turville Creek	4,373	0	854	1,109	299	2,111
	St. Martin River	28,108	6,475	8,911	3,720	1,087	7,921
	Bishopville Prong	12,529	6,475	2,815	878	158	2,202
	Shingle Landing Prong	12,185	0	5,299	1,785	299	4,803
Newport Bay	Newport Bay	28,488	0	7,684	3,910	4,909	11,986
	Newport Creek	4,151	0	1,280	391	663	1,818
	Marshall Creek	5,735	0	1,678	317	883	2,908
	Ayer Creek/Kitts Branch	11,815	0	2,961	2,446	1,725	4,683
Sinepuxent Bay		7,442	0	499	1,838	1,882	3,224
Chincoteague Bay	Chincoteague Bay	101,473	58,536	12,234	1,446	10,566	18,701
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	5,248	0	1,889	0	53	3,306

<sup>1</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

<sup>2</sup> Upstream drainage is that portion located outside of Maryland

<sup>3</sup> Maryland Coastal Bays Program asserts that the upstream portion of the Assawoman Bay watershed is around 40% of the total rather than 79%; this is currently under discussion with MDE and EPA

## Septic Systems

Conventional septic systems may contribute nitrogen to shallow groundwater and eventually to surface waters. Table 3 shows the number of septic systems in the

## MARYLAND COASTAL BAYS WATERSHED PLAN

Maryland portion of the watershed during the 2001-2004 monitoring period used to develop the TMDL.

**Table 3. Septic Systems in the Maryland Coastal Bays Watersheds (MDE, 2014)**

<b>MD Basin</b>	<b># of septic systems within 1,000 ft of surface water</b>	<b># of septic systems outside 1,000 ft of surface water</b>	<b>Total # of Maryland septic systems</b>
Assawoman Bay (includes Greys Creek)	214	71	285
Isle of Wight Bay (includes St. Martin's River, Manklin Creek, Herring Creek, and Turville Creek)	1,350	458	1,808
Newport Bay (includes Ayer Creek/Kitts Branch, Newport Creek, and Marshall Creek)	763	288	1,051
Sinepuxent Bay	251	95	346
Chincoteague Bay (includes Big Mill Pond)	443	255	698
<b>Totals</b>	<b>3,021</b>	<b>1,167</b>	<b>4,188</b>

### ***Atmospheric Deposition***

Atmospheric deposition of pollutants onto impervious surfaces can also contribute to nonpoint source pollution. This can include emissions from vehicles, industries, power plants, dry cleaners, and gas-powered lawn tools as well as agricultural sources such as animal feeding operations (such as chicken houses) and manure, as well as natural sources (such as "lightning, dust storms, forest fires, plants and trees, erupting volcanoes and wild animals).

### ***Shoreline Erosion***

Shoreline erosion also contributes nutrients into coastal waters, typically through sediment movement. This sediment degrades water quality, increases turbidity, impacts aquatic organisms, and releases nitrogen and phosphorus into the water.

### **Contribution of Nonpoint Sources to Pollutant Loads**

The baseline total nitrogen, phosphorus, and sediment loads for the Coastal Bays and percent of the load from each source of pollution are presented in Table 4, Table 5, and Table 6. As shown in Table 4 and Table 5, atmospheric deposition, agricultural runoff and urban runoff are the largest sources of total nitrogen loads to the surface water of the Maryland Coastal Bays, followed by shoreline erosion and septic, for nitrogen only.

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Table 4. TMDL Watershed Loads and Sources: Nitrogen (MDE, 2014)

Tidal Basin	TMDL Watershed <sup>1</sup>	Baseline Total Nitrogen Loads (lbs/yr)	Sources of Nitrogen (% of Baseline Load)							
			Upstream Loads	Atmospheric Deposition	Shoreline Erosion	Agriculture	Urban	Septic	Forest/ Barren Land	Point Source
Assawoman Bay	Assawoman Bay	360,653	70	13	3	5	6	3	0	0
	Greys Creek	124,228	68	4	4	14	4	5	1	0
Isle of Wight Bay	Isle of Wight Bay	425,192	16	12	4	32	33	9	2	3
	Manklin Creek	21,516	0	9	12	9	62	6	2	0
	Herring Creek	21,317	0	5	15	23	40	12	5	0
	Turville Creek	40,515	0	3	10	29	32	23	3	0
	St. Martin River	276,990	25	5	2	40	16	9	2	1
	Bishopville Prong	128,760	53	1	1	27	8	9	1	0
	Shingle Landing Prong	106,055	0	1	1	65	20	8	2	3
Newport Bay	Newport Bay	216,382	0	14	3	42	21	10	3	7
	Newport Creek	25,445	0	4	0	60	18	14	4	0
	Marshall Creek	33,766	0	11	4	59	11	3	4	3
	Ayer Creek/Kitts Branch	94,759	0	5	0	38	30	11	3	13
Sinepuxent Bay		90,037	0	48	10	7	24	8	2	0
Chincoteague Bay	Chincoteague Bay	1,233,856	53	28	4	12	1	1	1	0
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	N/A	N/A							

<sup>1</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch



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**Table 5. TMDL Watershed Loads and Sources: Phosphorus (MDE, 2014; MDE, 2002)**

Tidal Basin	TMDL Watershed <sup>1</sup>	Baseline Total Phosphorus Loads (lbs/yr)	Sources of Phosphorus (% of Baseline Load)							
			Upstream Loads	Atmospheric Deposition	Shoreline Erosion	Agriculture	Urban	Septic	Forest/Barren Land	Point Source
Assawoman Bay	Assawoman Bay	23,923	73	9	4	5	9	0	0	0
	Greys Creek	8,379	68	4	7	13	7	0	1	0
Isle of Wight Bay	Isle of Wight Bay	29,523	16	12	7	29	29	0	2	5
	Manklin Creek	1,739	0	6	16	7	68	0	3	0
	Herring Creek	1,598	0	3	22	20	50	0	5	0
	Turville Creek	2,604	0	2	18	30	46	0	4	0
	St. Martin River	18,903	30	4	4	38	21	0	2	1
	Bishopville Prong	9,095	62	1	2	24	10	0	1	0
	Shingle Landing Prong	7,065	0	1	3	62	29	0	3	2
Newport Bay	Newport Bay	14,287	0	11	6	40	31	0	4	8
	Newport Creek	1,566	0	3	0	63	29	0	5	0
	Marshall Creek	2,469	0	7	6	54	14	0	5	14
	Ayer Creek/Kitts Branch	6,043	0	4	0	38	46	0	3	9
Sinepuxent Bay		6,229	0	35	24	6	33	0	2	0
Chincoteague Bay	Chincoteague Bay	84,809	56	20	9	12	2	0	1	0
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	2,552	0	0	0	97	0	0	3	0

<sup>1</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

**Table 6. TMDL Watershed Loads and Sources: Sediment (MDE, 2002)**

Tidal Basin	TMDL Watershed	Baseline Total Sediment Loads (lbs/yr)	Sources of Sediment (% of Baseline Load)
Chincoteague Bay	Big Mill Pond	1,4228.8 m <sup>3</sup> /yr	Agriculture 97% Forest/other herbaceous 3%

## Section B. Expected Load Reductions

The objective of the nitrogen and phosphorus TMDLs for the Maryland Coastal Bays is to ensure that DO and Chlorophyll a concentrations meet the water quality criteria applicable to their designated use and control excessive algal growth and increase or maintain DO concentrations. As such, nitrogen and phosphorus loads below which the impaired waters are expected to meet their designated uses were allocated to nonpoint sources (called the Load Allocation or LA) and point sources (called the Wasteload Allocation or WLA for NPDES regulated point sources, as well as CAFOs) in Maryland in the 2014 Coastal Bays TMDL. Similarly, sediment allocations were presented in the Big Mill Pond TMDL.

To calculate the expected pollutant load reductions for this plan, the Maryland Load Allocations were subtracted from the nonpoint source baseline pollutant load in the Maryland portion of each TMDL watershed. The results are presented in Table 7, Table 8, and Table 9.

**Table 7. Maryland NPS TMDL Allocations and Required Reductions: Total Nitrogen**

<b>Tidal Basin</b>	<b>TMDL Watershed</b>	<b>MD NPS Baseline Loads (lbs/yr)</b>	<b>MD NPS Load Allocation (lbs/yr)</b>	<b>MD NPS Required Reduction (lbs/yr)</b>
Assawoman Bay	Assawoman Bay	105,182	94,734	10,448
	Greys Creek	38,019	35,511	2,508
Isle of Wight Bay	Isle of Wight Bay	325,590	197,733	127,858
	Manklin Creek	21,462	14,660	6,802
	Herring Creek	21,253	14,351	6,902
	Turville Creek	37,889	25,345	12,545
	St. Martin River	190,265	97,406	92,859
	Bishopville Prong	50,971	25,532	25,439
	Shingle Landing Prong	98,139	41,733	56,406
Newport Bay	Newport Bay	192,110	163,701	28,409
	Newport Creek	22,643	19,472	3,171
	Marshall Creek	29,230	25,785	3,445
	Ayer Creek/Kitts Branch	80,123	65,592	14,531
Sinepuxent Bay		88,542	86,331	2,212
Chincoteague Bay	Chincoteague Bay	575,553	528,241	47,311
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	N/A	N/A	N/A

\* Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

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**Table 8. Maryland NPS TMDL Allocations and Required Reductions: Total Phosphorus**

Tidal Basin	TMDL Watershed <sup>1</sup>	MD NPS Baseline Loads (lbs/yr)	MD NPS Load Allocation (lbs/yr)	MD NPS Required Reduction (lbs/yr) <sup>2</sup>
Assawoman Bay	Assawoman Bay	6,299	6,428	0 lbs required
	Greys Creek	2,196	2,416	0 lbs required
Isle of Wight Bay	Isle of Wight Bay	21,128	15,613	5,515
	Manklin Creek	1,739	1,240	499
	Herring Creek	1,598	1,146	452
	Turville Creek	2,405	1,752	653
	St. Martin River	11,884	8,514	3,370
	Bishopville Prong	2,686	2,481	205
	Shingle Landing Prong	6,527	3,987	2,540
Newport Bay	Newport Bay	12,392	11,070	1,322
	Newport Creek	1,332	1,223	109
	Marshall Creek	1,812	1,694	118
	Ayer Creek/Kitts Branch	5,347	4,560	787
Sinepuxent Bay		6,229	6,370	0 lbs required
Chincoteague Bay	Chincoteague Bay	35,899	34,159	1,740
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	2,522	880	1,642

<sup>1</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

<sup>2</sup> 0 lbs required indicates that the load allocation was higher than the nonpoint sources baseline load and therefore no reduction was required for nonpoint sources.

**Table 9. TMDL Watershed Allocations and Required Reductions: Sediment**

Tidal Basin	TMDL Watershed	Baseline Load (m <sup>3</sup> /yr)	Total Sediment TMDL Allocation (m <sup>3</sup> /yr)	Required Reduction (m <sup>3</sup> /yr)
Chincoteague Bay	Big Mill Pond	1,423	931.9 m <sup>3</sup> /yr	491

The Load Allocations shown in Tables 7-9 for the Maryland portion of each watershed were taken directly from the TMDLs, with the exception of an adjustment to reflect the official policy of the MDE Water Management Administration for crediting reductions

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from septic system conversions, described in Appendix B. The Maryland nonpoint source baseline loads for each watershed were provided by MDE (Jeff White, personal communication, July 31, 2019). Two adjustments were made regarding the loads from agriculture and septic systems. Documentation of the methods for determining Maryland nonpoint source baseline loads is provided in Appendix B.

## Section C. Proposed Management Measures

The TMDLs provide a baseline or starting point for the required nutrient and sediment reductions. Although the Coastal Bays TMDL was approved in 2014, the model timeframe was 2000-2005. The TMDL analysis was conducted using 2001-2004 as a baseline, which includes wet, dry and average years. The year 2000 served as the model initiation period and water quality data was available up to August of 2005; therefore, the delivered loads represent an average for the 2001-2004 time periods. As a result, 2005 was identified as the baseline year and the Maryland Department of the Environment (MDE) confirmed that the County could elect to account for all best management practice (BMP) implementation from 2005 through the present toward the required pollutant load reductions (Shanks, 2016). For the Big Mill Pond TMDL, which was approved in 2002 (but based on 2001 data), BMPs installed after 2001 were counted toward the required reductions.

This section describes the types of management measures proposed, the extent of BMPs implemented in each watershed since the TMDL baseline and their associated nutrient and sediment reductions. It also summarizes proposed additional management measures for meeting the required reductions in Assawoman Bay and a general approach to identify additional management measures for the other TMDL watersheds.

### Description of Management Measures

Worcester County, the towns of Ocean City and Berlin, the Maryland Coastal Bays Program, the Maryland Department of Agriculture (MDA), and other partners maintain data on nonpoint source management measures implemented to reduce nutrient and sediment loads. A brief description of each management measure by major BMP category is provided below. BMP definitions are taken from MACS, 2013; MDA, 2019a; MDA, 2019b; the Maryland Stormwater Management Design Manual; and the Chesapeake Bay Program (CBP).

#### *Agricultural BMPs*

- *Conservation Cover* - A practice which establishes and maintains perennial vegetative cover to protect soil and water resources on agricultural land retired from production or other lands requiring protective cover such as those adjacent to state waters or other sensitive natural source areas.
- *Wetland Creation/Restoration* - An area of vegetated wetland to remove sediment, nutrients, organic matter and other pollutants from surface and ground water associated with agricultural operations.
- *Filter Strips* - A strip or area of herbaceous vegetation situated between cropland, grazing land, or disturbed land (including forest land), and environmentally sensitive areas that provides protection from erosion and prevents pollution from nutrients, sediment, or agricultural chemicals from reaching the waters of the State from overland flow.
- *Grassed Waterways* - A natural or constructed waterway, shaped or graded and established in suitable vegetation, to safely convey water across areas of concentrated flow.



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- *Windbreaks* – Rows of trees or shrubs, also called shelterbelts, planted around the edges of agricultural fields to provide shelter from the wind and protect soil from erosion.
- *Riparian Forest Buffers* - An area of trees, woody shrubs and other vegetation located adjacent to and up-gradient from waters of the state that remove sediment, organic material, nutrients, pesticides and other pollutants in surface runoff and reduce excess nutrients and other chemicals in shallow subsurface flow and reduce pesticide drift in order to prevent or abate pollution.
- *Riparian Herbaceous Cover* - A strip or area of herbaceous vegetation situated in the transitional zone between terrestrial and aquatic habitats that protect and improve water quality, reduce erosion from wind and water and prevent pollution from nutrients, sediment, organic materials or agricultural chemicals from reaching the waters of the State.
- *Field Border* – A border or strip of perennial vegetation established at the outside edge of a field where excessive sheet and rill erosion is occurring.
- *Cover Crops* - In the fall, cold-hardy cereal grains such as wheat, rye and barley are planted as cover crops in newly harvested fields. Once established, cover crops recycle unused plant nutrients remaining in the soil from the previous summer crop and protect fields against wind and water erosion.
- *Water Control Structures* - A structure in a water management system that conveys water, controls the direction or rate of flow, maintains a desired water surface elevation or measures water. This includes roof runoff structures that collect, control, and dispose of runoff water from roofs.
- *Heavy Use Area Protection* - Stabilization to protect an area on a farm which is being utilized frequently and intensively by livestock or farm equipment in order to prevent or abate pollution.
- *Nutrient Management Plans (NMPs)* – A plan that specifies how much fertilizer, manure or other nutrient sources may be safely applied to crops to achieve yields and prevent excess nutrients from impacting waterways.
- *Soil Conservation and Water Quality Management Plans (SCWQPs)* – A comprehensive plan that addresses natural resource management on agricultural lands and utilizes BMPs that control erosion and sediment loss and manage runoff. SCWQPs includes management practices such as crop rotations and structural practices such as sediment basins and grade stabilization structures.

### *Urban BMPs*

- *Rain Gardens/Bioretenention* – Practices that capture and temporarily store runoff before infiltrating it into underlying soils where most pollutants are filtered.
- *Rooftop Disconnection* – Directing flow from downspouts onto vegetated areas where it can soak into or filter over the ground.
- *Rain Barrels* – Practices that capture and temporarily store rooftop runoff.
- *Infiltration* - Includes landscape infiltration and infiltration trenches. Landscape infiltration utilizes on-site vegetative planting areas to capture, store, and treat stormwater runoff. An infiltration trench is an excavated pit filled with gravel or stone that provides temporary storage of runoff within the void space in the stone media.

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- *Alternative Surfaces* – Alternatives to impervious surfaces that include permeable pavers, pervious asphalt and pervious concrete.
- *Stormwater Wet Ponds and Wetlands* - A permanent pool of standing water that promotes a better environment for gravitational settling, biological uptake and microbial activity to treat stormwater runoff.
- *Storm Drain Cleanouts* – Removal of solids directly from storm sewer systems (i.e., catch basins, within storm drain pipes or captured at the storm drain outfall).

### ***Other BMPs***

- *Tree Planting* – Any tree planting in urban or agricultural areas, except those used to establish riparian forest buffers and those planted as part of a structural BMP (e.g. bioretention).
- *Non-Tidal Wetland Restoration* - The manipulation of the physical, chemical, or biological characteristics of a non-tidal site with the goal of returning natural/historic functions to a former non-tidal wetland.
- *Tidal Wetland Restoration* - The manipulation of the physical, chemical, or biological characteristics of a tidal site with the goal of returning natural/historic functions to a former tidal wetland.
- *Shoreline Restoration* - any tidal shoreline practice (e.g., living shorelines) that prevents and/or reduces tidal sediments to the Bay.
- *Stream Restoration* – The manipulation of the physical, chemical and biological characteristics of a stream with the goal of returning natural/historic functions to a former or degraded aquatic resource.

### ***Septic Systems***

- *Septic Pretreatment Upgrades* – Septic system upgrades done after 2005 using Best Available Technology (BAT) and funded either privately or under the Bay Restoration Grant Program (see Figure 3).
- *Septic Conversions to Sewer* – Septic systems taken offline in areas connected to public WWTPs.

## **BMPs Implemented Since the TMDL Baseline Years**

Data from watershed partners was evaluated to determine which management measures were implemented between 2005 and 2019 (2002-2019 for Big Mill Pond), identify their location in the TMDL watersheds and assign pollutant load reductions. Table 10, Table 11, Table 12, and Table 13 summarize the extent of BMPs implemented since the TMDL baseline for agricultural BMPs, urban BMPs, other BMPs and septic systems, respectively.

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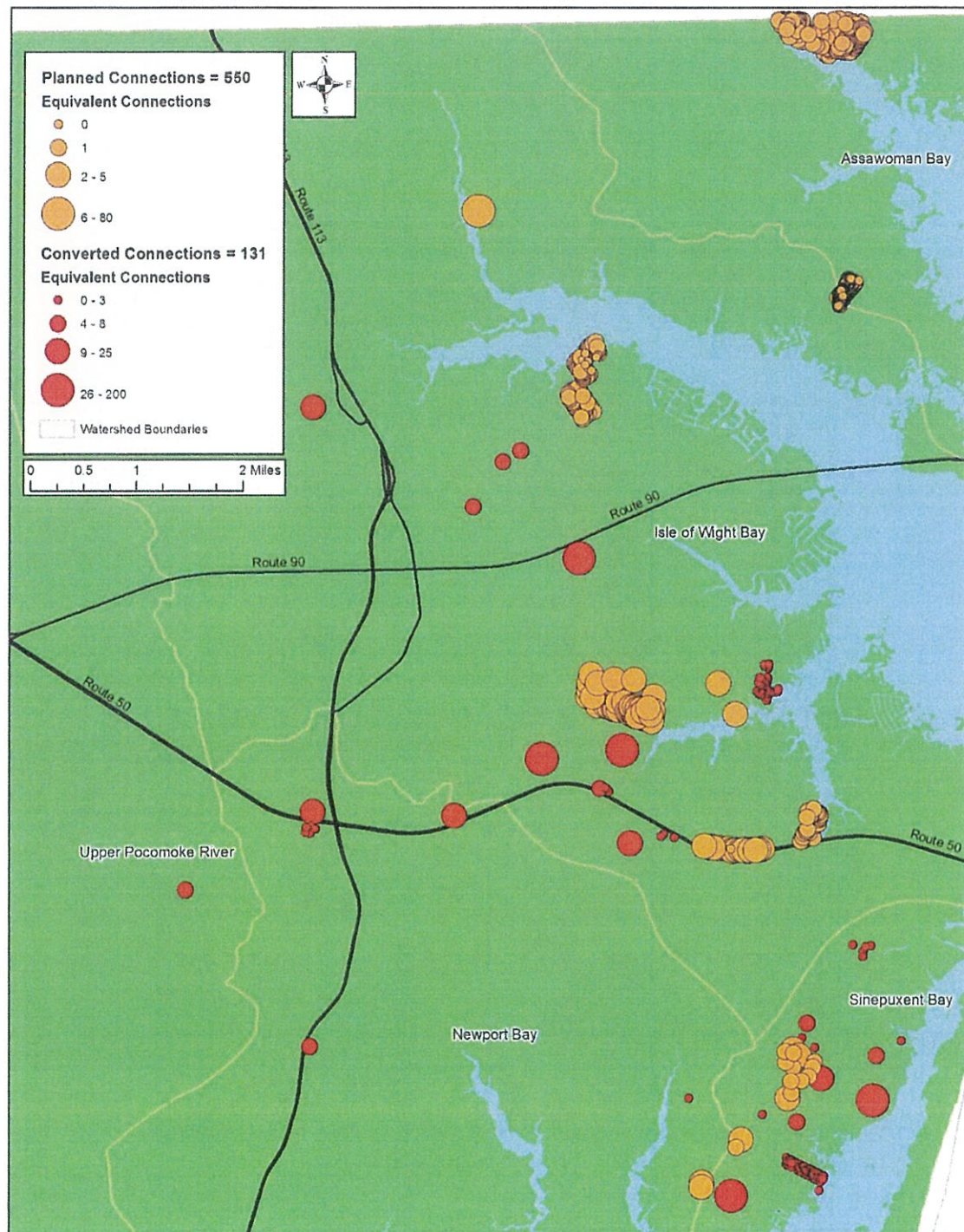


Figure 3. Properties Converted & Planned to be Converted from Septic to Sewer since 2005.  
(Data Sources; MDP, Worcester County, ESRI)

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Table 10. Agricultural BMPs Implemented Since the TMDL Baseline

Tidal Basin	TMDL Watershed <sup>1</sup>	Units Treated by Agricultural BMPs 2005-2019											
		Conservation Cover (acres)	Wetland Creation/ Restoration (acres)	Filter Strips/ Grassed Waterways (acres)	Windbreak/ Shelterbelt Establishment (ft)	Riparian Forest/ Herbaceous Cover (acres)	Field Borders (ft)	Water Control Structures (no)	Roof Runoff Structure (acres)	Heavy Use Protection (acres)	Cover Crops (acres)	Nutrient Management Plans (acres)	Soil Conservation & Water Quality Management Plans (acres)
Assawoman Bay	Assawoman Bay	0.00	1.00	0.00	2000.00	0.00	0.00	0.00	0.00	5.38	388.97	1075.61	192.75
	Greys Creek	0.00	0.97	0.00	1945.83	0.00	0.00	0.00	0.00	5.23	378.44	1025.79	187.53
Isle of Wight Bay	Isle of Wight Bay	0.00	14.00	0.00	99.98	0.00	0.00	0.00	0.00	7.69	2675.41	5968.29	4021.69
	Manklin Creek	0.00	0.20	0.00	1.44	0.00	0.00	0.00	0.00	0.11	38.63	48.54	58.05
	Herring Creek	0.00	0.55	0.00	3.94	0.00	0.00	0.00	0.00	0.30	105.50	181.64	158.59
	Turville Creek	0.00	1.16	0.00	8.27	0.00	0.00	0.00	0.00	0.64	221.37	302.89	332.78
	St. Martin River	0.00	12.09	0.00	86.33	0.00	0.00	0.00	0.00	6.64	2309.91	5422.64	3472.27
	Bishopville Prong	0.00	3.82	0.00	27.27	0.00	0.00	0.00	0.00	2.10	729.70	1688.85	1096.89
	Shingle Landing Prong	0.00	7.19	0.00	51.34	0.00	0.00	0.00	0.00	3.95	1373.61	3311.56	2064.82
Newport Bay	Newport Bay	0.00	6.01	96.50	970.00	8.80	0.00	0.00	0.00	11.15	3776.27	4262.05	1223.08
	Newport Creek	0.00	1.00	16.07	161.58	1.47	0.00	0.00	0.00	1.86	629.06	776.68	203.74
	Marshall Creek	0.00	1.31	21.07	211.82	1.92	0.00	0.00	0.00	2.43	824.64	888.12	267.09
	Ayer Creek/Kitts Branch	0.00	2.32	37.19	373.79	3.39	0.00	0.00	0.00	4.30	1455.17	1503.19	471.31
Sinepuxent Bay	Sinepuxent Bay	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	301.60	80.96

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Table 10. Agricultural BMPs Implemented Since the TMDL Baseline

Tidal Basin	TMDL Watershed <sup>1</sup>	Units Treated by Agricultural BMPs 2005-2019											
		Conservation Cover (acres)	Wetland Creation/ Restoration (acres)	Filter Strips/ Grassed Waterways (acres)	Windbreak/ Shelterbelt Establishment (ft)	Riparian Forest/ Herbaceous Cover (acres)	Field Borders (ft)	Water Control Structures (no)	Roof Runoff Structure (acres)	Heavy Use Protection (acres)	Cover Crops (acres)	Nutrient Management Plans (acres)	Soil Conservation & Water Quality Management Plans (acres)
Chincoteague Bay	Chincoteague Bay	9.20	61.40	36.70	1000.00	49.90	2229.00	2.00	1.00	10.12	5928.44	6589.08	1716.65
TOTAL		9.20	82.41	133.20	4069.98	58.70	2229.00	2.00	1.00	34.34	12769.09	18196.63	7235.13
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	1.42	20.53	34.01	154.32	68.56	343.99	0.31	0.15	1.56	914.90	1430.03	264.93

<sup>1</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.



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**Table 11. Urban BMPs Implemented Since the TMDL Baseline**

Tidal Basin	TMDL Watershed <sup>2</sup>	Units Treated by Urban Stormwater BMPs 2005-2019 <sup>1</sup>						
		Bioretention /Rain Gardens	Wet Ponds/ Wetlands	Infiltration	Alternative Surfaces	Rain Barrels	Rooftop Dis-connection	Storm Drain Cleanout
Assawoman Bay	Assawoman Bay	0.48	0.00	2.58	1.82	0.27	0.97	176.85
	Greys Creek	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Isle of Wight Bay	Isle of Wight Bay	0.03	50.55	4.09	3.15	0.11	0.09	19.65
	Manklin Creek	0.00	50.50	0.00	0.00	0.00	0.00	0.00
	Herring Creek	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Turville Creek	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	St. Martin River	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Bishopville Prong	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Shingle Landing Prong	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Newport Bay	Newport Bay	0.40	2.00	0.00	0.00	0.00	0.00	0.00
	Newport Creek	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Marshall Creek	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Ayer Creek/Kitts Branch	0.40	2.00	0.00	0.00	0.00	0.00	0.00
Sinepuxent Bay	Sinepuxent Bay	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chincoteague Bay	Chincoteague Bay	1.60	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL		2.51	52.55	6.67	4.97	0.38	1.05	196.50
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

<sup>1</sup> All units shown are acres treated except for catch basin cleanouts which is tons of material removed.

<sup>2</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

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**Table 12. Other BMPs Implemented Since the TMDL Baseline**

Tidal Basin	TMDL Watershed <sup>1</sup>	Units Treated by Other BMPs 2005-2019				
		Tree Planting (acres)	Non-Tidal Wetland Restoration (acres)	Tidal Wetland Restoration (acres)	Shoreline Restoration (ft)	Stream Restoration (ft)
Assawoman Bay	Assawoman Bay	0.00	0.00	4.30	750.00	0.00
	Greys Creek	0.00	0.00	0.00	750.00	0.00
Isle of Wight Bay	Isle of Wight Bay	6.00	20.44	0.00	770.00	600.00
	Manklin Creek	0.00	0.00	0.00	0.00	0.00
	Herring Creek	0.00	0.00	0.00	100.00	0.00
	Turville Creek	0.00	0.00	0.00	110.00	0.00
	St. Martin River	6.00	20.44	0.00	0.00	600.00
	Bishopville Prong	4.50	20.44	0.00	0.00	600.00
	Shingle Landing Prong	0.00	0.00	0.00	0.00	0.00
Newport Bay	Newport Bay	4.40	0.00	0.00	0.00	0.00
	Newport Creek	0.00	0.00	0.00	0.00	0.00
	Marshall Creek	0.00	0.00	0.00	0.00	0.00
	Ayer Creek/Kitts Branch	4.40	0.00	0.00	0.00	0.00
Sinepuxent Bay	Sinepuxent Bay	0.00	0.05	0.45	0.00	0.00
Chincoteague Bay	Chincoteague Bay	0.00	0.00	21.80	0.00	0.00
TOTAL		10.40	20.49	26.55	1520.00	600.00
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	0.00	0.00	0.00	0.00	0.00

<sup>1</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

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**Table 13. Septic Upgrades and Conversions Since the TMDL Baseline**

Tidal Basin	TMDL Watershed <sup>1</sup>	Number of Septic Upgrades and Conversions			
		Septic Pretreatment Upgrades		Septic Conversions to Sewer	
		In Critical Area	Outside Critical Area	In Critical Area	Outside Critical Area
Assawoman Bay	Assawoman Bay	11	4	0	0
	Greys Creek	5	0	0	0
Isle of Wight Bay	Isle of Wight Bay	95	14	277	254
	Manklin Creek	0	0	0	120
	Herring Creek	7	2	0	31
	Turville Creek	8	3	277	54
	St. Martin River	80	9	0	49
	Bishopville Prong	6	4	0	0
	Shingle Landing Prong	31	4	0	49
Newport Bay	Newport Bay	26	14	6	30
	Newport Creek	0	0	0	5
	Marshall Creek	1	0	0	0
	Ayer Creek/Kitts Branch	5	4	6	25
Sinepuxent Bay	Sinepuxent Bay	176	0	487	3
Chincoteague Bay	Chincoteague Bay	34	2	0	0
TOTAL		342	34	770	287
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	0	0	0	0

<sup>1</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

Data sources for Tables 10-13 include:

- An agricultural BMP database provided by MDA for the major tidal basin. Note that because the MDA data was not provided in spatial format, exact locations of these BMPs are unknown. Total units installed in each of the tidal basins were distributed to the TMDL watersheds based on the proportional agricultural land use distribution.
- Chesapeake and Atlantic Coastal Bays Trust Fund projects, including stormwater retrofits, tree planting, tidal and non-tidal wetland restoration, shoreline restoration, and stream restoration
- Public Landing stormwater retrofits

- Town of Berlin rain garden retrofits
- Ocean Parkway stormwater pond retrofits
- Ocean City stormwater BMPs installed as retrofits or to meet redevelopment requirements. Note that BMPs installed to comply with stormwater management requirements for new development do not count towards the required load reductions since these practices are designed to help offset the additional pollutant load increase.
- Catch basin cleaning information provided by the Town of Ocean City
- Septic conversions, upgrades and pre-treatment information provided by Worcester County

Assumptions regarding this data are described in Appendix C. Street sweeping data provided by The Town of Ocean City and the Town Berlin were not included in this version of the plan because it is not sufficient to quantify an increase in pollutant load reductions due to street sweeping since the TMDL baseline. Berlin's program appears to have only become formalized after the baseline year but since the sweeping frequency is low and the sweeper technology is broom sweepers, the credit would be negligible based on the CBP and MDE crediting methods available, as described in Appendix C.

## Pollutant Reductions Achieved

Nutrient and sediment load reductions were calculated for the BMPs implemented since the TMDL baseline, using the information summarized above for agricultural BMPs, urban BMPs, septic systems and other BMPs. Table 14 presents the nitrogen load reductions achieved by sector and Table 15 presents the phosphorus load reductions by sector. Table 16 presents the total nutrient reductions achieved as well as the percent of the required reductions met in each TMDL watershed. Table 17 presents this information for sediment. Major assumptions regarding pollutant removal credit include:

- Pollutant removal crediting was primarily based on the CBP's protocols.
- For BMPs funded by the Chesapeake and Atlantic Coastal Bays Trust Fund, reductions provided using Field Doc (which is based on the CBP protocols) were used.
- Pollutant removal reductions for nutrient management plans and soil conservation/water quality plans were estimated using data provided by MDA and data reported in the Chesapeake Assessment and Scenario Tool (CAST) for the Chesapeake Bay portion of Worcester County and extrapolated to the Coastal Bays to estimate the acres of land under each type of plan. This is an annual BMP so credit was only given for the estimated increase in acres from the TMDL baseline to the present.
- Pollutant removal reductions for urban BMPs installed in the Town of Ocean City to meet redevelopment requirements were estimated using the CBP protocols for urban stormwater retrofits. A conservative discount factor of 50% was applied because it is unknown what portion of the stormwater treatment provided was for existing impervious cover vs new impervious cover added as part of a redevelopment project.

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- Sediment reductions for the Big Mill Pond watershed were calculated following assumptions provided in the TMDL modeling that for every 1% reduction achieved for phosphorus, a 0.5% reduction is achieved for sediment.

More detail on these assumptions and the crediting methodologies used is provided in Appendix C.

**Table 14. NPS Nitrogen Load Reductions for BMPs Implemented Since the TMDL Baseline**

<b>Tidal Basin</b>	<b>TMDL Watershed<sup>1</sup></b>	<b>Agricultural BMPs (lbs TN/yr)</b>	<b>Urban BMPs (lbs TN/yr)</b>	<b>Septic BMPs (lbs TN/yr)</b>	<b>Other BMPs (lbs TN/yr)</b>
Assawoman Bay	Assawoman Bay	3,770.0	714.5	146.0	430.5
	Greys Creek	3,614.2	0.0	58.4	35.7
Isle of Wight Bay	Isle of Wight Bay	22,573.0	334.1	5,518.8	794.0
	Manklin Creek	254.8	39.7	525.6	0.0
	Herring Creek	781.2	0.0	226.3	4.8
	Turville Creek	1,405.1	0.0	3,578.5	5.2
	St. Martin River	20,098.7	0.0	1,188.4	757.4
	Bishopville Prong	5,824.1	0.0	87.6	713.1
	Shingle Landing Prong	12,641.5	0.0	594.2	0.0
Newport Bay	Newport Bay	20,048.7	2,344.4	566.5	128.0
	Newport Creek	3,357.5	0.0	21.9	0.0
	Marshall Creek	4,090.5	0.0	11.7	0.0
	Ayer Creek/Kitts Branch	7,679.0	2,344.4	255.5	128.0
Sinepuxent Bay		669.0	0.0	7,757.0	44.1
Chincoteague Bay	Chincoteague Bay	32,550.2	13.4	405.9	2,001.9
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	N/A	N/A	N/A	N/A

<sup>1</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.



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**Table 15. NPS Phosphorus Load Reductions for BMPs Implemented Since the TMDL Baseline**

Tidal Basin	TMDL Watershed <sup>1</sup>	Agricultural BMPs (lbs TP/yr)	Urban BMPs (lbs TP/yr)	Septic BMPs (lbs TP/yr) <sup>2</sup>	Other BMPs (lbs TP/yr)
Assawoman Bay	Assawoman Bay	196.2	153.7	N/A	49.2
	Greys Creek	186.3	0.0	N/A	25.2
Isle of Wight Bay	Isle of Wight Bay	979.0	51.5	N/A	77.7
	Manklin Creek	8.5	5.7	N/A	0.0
	Herring Creek	29.2	0.0	N/A	3.4
	Turville Creek	44.5	0.0	N/A	3.7
	St. Martin River	894.2	0.0	N/A	51.8
	Bishopville Prong	250.4	0.0	N/A	49.9
	Shingle Landing Prong	577.5	0.0	N/A	0.0
Newport Bay	Newport Bay	568.9	299.8	N/A	5.4
	Newport Creek	105.5	0.0	N/A	0.0
	Marshall Creek	110.6	0.0	N/A	0.0
	Ayer Creek/Kitts Branch	196.9	299.8	N/A	5.4
Sinepuxent Bay		37.3	0.0	N/A	3.7
Chincoteague Bay	Chincoteague Bay	919.5	1.6	N/A	121.8
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	488.0	0.0	N/A	0.0

<sup>1</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

<sup>2</sup> The septic BMP crediting methodology only provides a load reduction for TN.

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**Table 16. NPS Nutrient Load Reductions Achieved from BMPs Implemented Since the TMDL Baseline**

Tidal Basin	TMDL Watershed <sup>1</sup>	Total NPS Load Reduction from Existing BMPs <sup>2</sup>			
		TN (lbs/yr)	TP (lbs/yr)	TN (% of Required)	TP (% of Required)
Assawoman Bay	Assawoman Bay	5,061.1	399.1	48.44%	0 lbs required
	Greys Creek	3,708.3	211.5	147.87%	0 lbs required
Isle of Wight Bay	Isle of Wight Bay	29,220.0	1,108.2	22.85%	20.09%
	Manklin Creek	820.2	14.2	12.06%	2.83%
	Herring Creek	1,012.2	32.5	14.67%	7.19%
	Turville Creek	4,988.8	48.2	39.77%	7.38%
	St. Martin River	22,044.6	945.9	23.74%	28.07%
	Bishopville Prong	6,624.8	300.3	26.04%	146.16%
	Shingle Landing Prong	13,235.7	577.5	23.47%	22.74%
Newport Bay	Newport Bay	23,087.7	874.1	81.27%	66.11%
	Newport Creek	3,379.4	105.5	106.59%	97.06%
	Marshall Creek	4,102.1	110.6	119.08%	93.67%
	Ayer Creek/Kitts Branch	10,407.0	502.0	71.62%	63.82%
Sinepuxent Bay	Sinepuxent Bay	8,470.0	41.0	383.00%	0 lbs required
Chincoteague Bay	Chincoteague Bay	34,971.4	1,043.0	73.92%	59.96%
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	N/A	488.0	N/A	29.72%

<sup>1</sup> Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

<sup>2</sup> Green shaded cells indicate the load reduction goal has been met.

**Table 17. NPS Sediment Load Reductions Achieved from BMPs Implemented Since the TMDL Baseline**

Tidal Basin	TMDL Watershed	TSS (m <sup>3</sup> /yr) <sup>1</sup>	TSS (% of Required) <sup>2</sup>
Chincoteague Bay	Big Mill Pond (Separate TMDL with 2001 baseline year)	137.6 m <sup>3</sup>	28.03%

<sup>1</sup> The Big Mill Pond watershed only included agricultural BMPs.

<sup>2</sup> Assumption from the Big Mill TMDL is that for every 1% reduction achieved in TP, a 0.5% reduction will be achieved in TSS.

## Proposed Management Measures

The estimated pollutant reductions from BMPs implemented since the TMDL baseline are not sufficient to meet the required reductions in many of the TMDL watersheds. This section presents a strategy for filling the gap with future proposed BMPs for the Assawoman Bay watershed. The County will continue to update this plan to refine a strategy for the remaining watersheds, focusing first on ones that are closest to achieving the required reductions. A general strategy for identifying future proposed BMPs to fill the gaps is described in this section.

### *Assawoman Bay*

Table 18 shows that, with implementation of BMPs from 2005-2019, the required nutrient reductions for Greys Creek have been met and there is a gap of 5,387 lbs/yr to meet the nonpoint source nitrogen required load reduction for Assawoman Bay. Assawoman Bay does not have a nonpoint source phosphorus reduction requirement due to the load allocation being higher than the baseline load.

**Table 18. Maryland NPS TMDL Required and Achieved Reductions for Nitrogen**

Tidal Basin	TMDL Watershed	Baseline Loads (lbs/yr)	Load Allocation (lbs/yr)	Required Reduction (lbs/yr)	Reduction from Existing BMPs (lbs/yr)	Remaining Required Reduction (lbs/yr)
Assawoman Bay	Assawoman Bay (includes Greys Creek)	105,182	94,734	10,448	5,061	<b>5,387</b>
	Greys Creek	38,019	35,511	2,508	3,708	Requirement Met

A proposed plan to meet the remaining required nitrogen load reduction is summarized in Table 19 and includes a mix of reductions from septic, urban, agricultural, and stream/shoreline erosion sources. Assumptions are described following the table and pollutant load reductions were estimated using the methods described in Appendix C. The suite of proposed BMPs in Table 19 will be refined through discussion with watershed stakeholders and revised as more information is gathered on specific BMP opportunities, such as through the watershed assessment planned for Assawoman Bay in 2019-2020.

**Table 19. Proposed BMPs to Meet the Remaining NPS Nitrogen Required Reduction**

BMP	TN Load Reduction (lbs/yr)	Percent of Gap Filled
Septic Conversions	1,203	22%
Urban BMPs	1,535	29%
Agricultural BMPs	1,351	25%
Stream and shoreline BMPs	1,298	24%
<b>TOTAL</b>	<b>5,387</b>	<b>100%</b>

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### Agricultural BMPs

- Increase the number of acres with soil conservation and water quality management plans by 15% (74 lbs/yr)
- Increase the level of compliance for core Nutrient Management Plans to 70% as identified in Worcester County's Phase III Watershed Implementation Plan (WIP) for the Chesapeake Bay TMDL (193 lbs/yr)
- Treat 10 acres with other agricultural BMPs such as filter strips/grass waterways, wetland restoration/creation, roof runoff structures, heavy use protection, riparian forest/herbaceous cover, and denitrifying ditch bioreactors (1,084 lbs, based on average value of 110 total nitrogen lbs reduced per unit from MDA, 2018)

### Urban BMPs

- Install stormwater BMPs, such as bioretention/rain gardens, infiltration practices, bioswales, and permeable pavement, to treat 196 acres of land (152 acres of existing impervious cover), either as retrofits or associated with redevelopment in Ocean City (1,535 lbs/yr). Some of these reductions may come from existing BMPs that are not currently accounted for in this plan due to incomplete information (see Appendix C).

### Other BMPs

- Plant 20.5 acres with trees (207 lbs/yr)
- Restore 3 acres of non-agricultural riparian forest buffer (30 lbs/yr)
- Restore 9,707 feet of stream (728 lbs/yr)
- Restore 7,000 feet of shoreline (333 lbs/yr)

### Septic Systems

- Implement 103 equivalent connection septic conversions at Bayview Estates and Hidden Harbor (1,203 lbs/yr)

### ***Strategy for Remaining Watersheds***

The County is committed to restoring its waters and implementing the actions outlined in this plan. Future iterations will identify future proposed BMPs whose associated pollutant load reductions will result in compliance with the TMDL requirements for additional watersheds. Some initial strategies that are being discussed with watershed stakeholders are listed below.

### Agricultural BMPs

- No data on planned BMPs was provided by MDA for the Coastal Bays. Explore using WIP III data for the Chesapeake Bay portion of Worcester County and extrapolate to the Coastal Bays based on projected increases in the Chesapeake (see Appendix C).

### Urban BMPs

- Graham Ave Submerged Gravel Wetland in Berlin has been identified as a planned BMP. Identify any additional specific projects in the pipeline from partners.

- Use desktop and field assessment to identify additional urban BMP opportunities can be implemented in the future.
- Discuss with Town of Berlin and Town of Ocean City considering upgrades to advanced sweeper technology and measuring the mass of street dirt picked up annually, which will provide the most bang for buck in terms of nutrient removal credit for street sweeping. Need to weigh the cost vs benefit of these upgrades.
- Discuss with Town of Ocean City whether the amount of material removed from the catch basins through recent storm drain cleanouts is a good predictor of what can be removed on an annual basis moving forward, given that they had not been cleaned out in a very long time. Since the credit is annual, the same level must be maintained, or increased to continue receiving it.

### Other BMPs

- Swan Gut/Big Mill stream restoration has been identified as a planned BMP.
- Ilea Fehrer living shoreline (in the Ayer Creek/Kitts Branch watershed) has been identified as a planned BMP.
- Use desktop and field assessment to identify additional urban BMP opportunities can be implemented in the future. For example, the Maryland Department of Natural Resources Coastal Atlas can be used to identify lengths of tidal shoreline that exhibit high amounts of erosion and develop a conservative estimate of the length that could potentially be restored.

### Septic systems

- Use County information on planned septic conversions and upgrades and determine if any additional septic conversions or pretreatment upgrades can be added.

Some areas in which additional gains can likely be made include:

1. *Improved documentation of installed practices.* Some BMPs that were submitted were not able to be fully credited because they did not include important information needed to calculate the associated pollutant load reduction. An example is the stormwater BMP database provided by the Town of Ocean City that includes a suite of mitigation BMPs with no drainage area or storage volume (note that although mitigation may not be credited, some projects exceed the credit required for mitigation purposes and that amount could be credited). The County expects that by using a consistent reporting format like the BMP Implementation Tracking Sheet, it will be able to take full credit for all restoration efforts in the future.
2. *More detailed information on the feasibility of and locations for installing BMPs.* Desktop analysis and detailed on-the-ground assessments to identify candidate sites for stormwater retrofits, agricultural BMPs and stream/shoreline BMPs will be conducted by the Maryland Coastal Bays Program this year for the Assawoman, Isle of Wight and St Martins River watersheds. This work will assist in helping to target specific BMP opportunities in these watersheds. The County will continue to pursue grant funding for detailed watershed assessment of BMP opportunities in other priority watersheds.



## Section D: Technical and Financial Assistance Needed

### Estimated Costs for Assawoman Bay

Table 20 presents the estimated costs for implementing the management measures proposed in this plan for Assawoman Bay.

Table 20. Estimated Cost for BMP Implementation in Assawoman Bay				
BMP	Number of Units	Unit Value	Unit Cost/Year	Total Annual Cost
<b>Agricultural BMPs</b>				
Soil Conservation and Water Quality Management Plans	86.5	acres	\$1.94	\$168
Core Nutrient Management Plans	54.26	acres	\$16.55	\$898
Other agricultural BMPs * Wetland creation/restoration * Filter strips/grassed waterways * Riparian forest/herbaceous cover * Roof runoff structures * Heavy use protection * Denitrifying ditch bioreactors	10	acres	\$419.90 <sup>1</sup>	\$4,199
<b>Urban BMPs</b>				
Stormwater retrofits/redevelopment BMPs * Bioretention/rain gardens * Infiltration practices * Permeable pavement * Bioswales	196	acres	\$4,306.95 <sup>1</sup>	\$844,162
<b>Other BMPs</b>				
Tree planting	20.5	acres	\$84.63	\$1,735
Riparian buffers	3	acres	\$91.90	\$276
Stream restoration	9707	feet	\$76.08	\$738,509
Shoreline restoration	7000	feet	\$28.45	\$199,150
<b>Septic Systems</b>				
Septic conversions	103	systems	\$526.84	\$54,265
<b>TOTAL</b>				<b>\$1,843,360</b>

<sup>1</sup> Composite cost using a variety of BMPs

The unit cost data shown in Table 20 is from the Maryland cost profiles that are provided with the Chesapeake Assessment and Scenario Tool (CAST) and include capital, operation and maintenance (O&M), and opportunity costs. Costs are annualized average costs per unit of BMP. Capital and opportunity costs are amortized over the BMP lifespan and added to annual O&M costs for a total annualized cost.

### Potential Funding Sources

Given the projected cost to meet the TMDL goals, reliable funding sources for BMP implementation are needed. Worcester County has several sources of funds it can commit to project implementation, including Forest Conservation Act and Critical Area

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in-lieu fees as well as CIP funding. The Town of Berlin has a dedicated source of funding through a stormwater utility that generates funds annually for capital projects to help curb flooding, reduce erosion and polluted runoff, and combat property damage. However, grants, loans and other sources of funding will be needed. The Town of Berlin has also been able to secure funding for stormwater projects. The Town received a \$165,000 grant from the Federal Emergency Management Agency (FEMA), \$800,000 in Community Development Block Grant (CDBG) funds, and a \$962,000 grant from the Maryland Department of Natural Resources (DNR) for stormwater improvements in 2014 to address runoff and flooding issues and improve water quality.

Table 21 lists the numerous grant, loan and cost-share programs that can be used for implementation of urban, septic, agricultural and other BMPs.

Table 21. Funding Sources for Coastal Bay BMP Implementation	
Program Name	Description
<b>Urban BMP Funding</b>	
319 Nonpoint Source Grant Program	This program is administered by Maryland Department of Environment (MDE) and uses federal funding to provide financial assistance for the implementation of nonpoint source best management practices and program enhancements as a means of controlling the loads of pollutants entering the State's waterways.
National Fish and Wildlife Foundation Five Star and Urban Waters Restoration Grant Program	The program supports projects that address water quality issues in priority watersheds and focuses on the stewardship and restoration of coastal, wetland and riparian ecosystems across the country. The program provides grants, technical support and opportunities for information exchange to enable community-based restoration projects such as streambank erosion, pollution from stormwater runoff, and degraded shorelines caused by development.
Chesapeake Bay Trust Watershed Assistance Grants	The Chesapeake Bay Trust, the Maryland Department of Natural Resources, and the Maryland Department of Environment Watershed Assistance grant program supports design assistance, watershed planning and programmatic development associated with protection and restoration programs and projects that lead to improved water quality in the Maryland Coastal Bays.
Maryland Coastal Bays Program	Grants have been made available to increase public awareness and public involvement in restoring and protecting Maryland's Coastal Bays and its tributaries in accordance with project goals in the Comprehensive Conservation Management Plan for the Coastal Bays. They include improving water quality, restoring and improving fish and wildlife populations and habitat, improving navigation and recreation, and insuring sound development and planning for our community.
Maryland Department of Natural Resources Maryland's Chesapeake & Atlantic Coastal Bays Trust Fund	Funds the most cost-effective, efficient non-point nutrient and sediment reduction project proposals in geographic targeted areas of the State. The Trust Fund encourages multi-year, multi-partner projects that will achieve the greatest reduction per dollar invested.

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**Table 21. Funding Sources for Coastal Bay BMP Implementation**

<b>Program Name</b>	<b>Description</b>
National Fish and Wildlife Foundation Environmental Solutions for Communities	This initiative is supported through a \$15 million contribution from Wells Fargo and is designed to support projects that link economic development and community well-being to the stewardship and health of the environment.
Maryland Department of Natural Resources Maryland CoastSmart Communities Grants	CoastSmart Communities Grants (CCG) provides financial assistance to local governments to encourage the incorporation of coastal management issues into local long-term strategic planning. Currently there are two tracks for funding: (Track A - CoastSmart Communities) that fund proposals aimed at understanding and planning for coastal hazards; and (Track B – Green Infrastructure Resiliency) for projects to pursue the use of green infrastructure to address localized stormwater flooding resulting from frequent and intense rain events.
<b>Agriculture Funding</b>	
USDA, NRCS, Conservation Program Conservation Reserve Enhancement Program (CREP)	CREP pays farmers paid an annual rental rate to remove environmentally sensitive land from production and implement conservation practices such as planting streamside buffers, creating wetlands and providing wildlife habitat.
Maryland Department of Agriculture Cover Crop Program	Grants are available to help farmers offset seed, labor and equipment costs associated with planting cover crops in the fall.
Maryland Agricultural Water Quality Cost-Share Program (MACS)	MACS provides farmers with grants to cover up to 87.5 percent of the cost to install BMPs on their farms to control soil erosion, manage nutrients, and safeguard water quality in streams, rivers, and the bays. Cover crops planted after the fall harvest to soak up unused fertilizers, streamside buffers of grasses and trees planted to protect waterways from agricultural runoff and sedimentation, and animal waste systems designed to help farmers collect and use manure resources are among 30 BMPs currently eligible for funding.
USDA, NRCS, Conservation Program Environmental Quality Incentives Program (EQIP)	The Environmental Quality Incentives Program (EQIP) is a voluntary program that provides financial and technical assistance to agricultural producers to plan and implement conservation practices that improve soil, water, plant, animal, air and related natural resources on agricultural land and non-industrial private forestland
USDA, NRCS, Conservation Program Conservation Stewardship Program (CSP)	This program helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resources concerns.
USDA, NRCS, Conservation Program Wetland Reserve Enhancement Partnership (WREP)	The Agricultural Conservation Easement Program (ACEP) provides financial and technical assistance to help conserve agricultural lands and wetlands and their related benefits. WREP is a voluntary program through which NRCS signs agreements with partners to leverage resources to carry out high priority wetland protection, restoration and enhancement and to improve wildlife habitat.

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**Table 21. Funding Sources for Coastal Bay BMP Implementation**

Program Name	Description
<b>Septic Funding</b>	
Maryland Department of Environment Water Quality Revolving Loan Fund (WQRLF)	Provides financial assistance and advisory services for a variety of projects to protect or improve the quality of Maryland's rivers, streams, lakes, the Chesapeake Bay and other water resources including low-interest loans to local governments to finance wastewater treatment plant upgrades, nonpoint source projects, and other water quality and public health improvement projects.
Maryland Department of Environment Bay Restoration Fund	The BRF funds upgrades to wastewater treatment plants (WWTP) and onsite disposal systems (OSDS). The <i>WWTP Fund</i> provides up to 100% in funding to upgrade wastewater treatment plants with enhanced nutrient removal technologies that allow sewage treatment plants to provide a highly advanced level of nutrient removal. The <i>OSDS Fund</i> provides up to 100% in grant funding for upgrades of existing systems to best available technology for nitrogen removal or for the marginal cost of using best available technology. Worcester County typically receives about \$167,000/year in BRF dollars for septic system enhancement and variable amounts for sewer connections, typically in the neighborhood of \$50,000 to \$100,000.
Maryland Department of Environment Linked Deposit Program	Provides a source of low-interest financing for certain water quality and drinking water capital projects. Below market interest rates are passed on to borrowers by participating commercial lenders with investment agreements with MDE6.

### Technical Assistance

The Coastal Bays Watersheds benefit from being part of the National Estuary Program. This designation has resulted in the development of the Maryland Coastal Bays Program (MCBP). The MCBP is a non-profit collaboration that provides scientific expertise, monitoring capabilities, fundraising skills, public outreach and engagement, and overall watershed planning. The MCBP has developed a comprehensive Conservation Management Plan (CCMP) that acts as a blueprint for restoration of the watershed. Partners include:

- Town of Ocean City
- Town of Berlin
- National Park Service (NPS)
- Worcester County
- U.S. Environmental Protection Agency
- Maryland Department of Natural Resources
- Maryland Department of Agriculture
- Maryland Department of Planning

Worcester County and the partners in the MCBP can act as the primary providers for technical assistance, as the partners provide much of the technical assistance in the State of Maryland.

## Section E. Information, Education, and Public Participation

The purpose of this section is to describe an information/education component that enhances public understanding of the project and encourage their participation in selecting, designing, and implementing the NPS management measures that will be implemented. This section of the plan includes the stakeholder outreach strategy including planning for public meetings, listing of identified stakeholders, and education and outreach materials.

Worcester County intends to work closely with Maryland Coastal Bays Program (MCBP) to promote and conduct public outreach regarding the TMDLs and their implementation. Maryland Coastal Bays Program (MCBP) is a U.S. Environmental Protection Agency National Estuary Program (NEP) that exists to protect and conserve the waters and surrounding watershed of Maryland's coastal bays to enhance their ecological values and sustainable use for both present and future generations. As an NEP, MCBP is a part of a non-regulatory program established by Congress that works to improve the waters, habitats and living resources of 28 estuaries across the country. MCBP is charged with using a consensus-building approach by involving community members in the decision-making process that makes it particularly suited to involvement with the education and outreach for the TMDL.

As an NEP, MCBP is guided by Comprehensive Conservation and Management Plan (CCMP, found at <http://mdcoastalbays.org/pdf/ccmp.pdf>) created and implemented with consensus and assistance from partners and stakeholders, including Worcester County. Other MCBP partners include towns of Ocean City and Berlin, the National Park Service (NPS), the U.S. Environmental Protection Agency (EPA), and the Maryland Departments of Natural Resources, Agriculture and Planning (DNR, MDA, and MDP).

### Citizen Outreach and Input

A primary way MCBP's communicates with the public and receives feedback is through various public media and events. MCBP attends meetings, hosts events and participates in citizen forums on many bay related topics. Feedback opportunities are sought through a broad spectrum of major resources groups such as citizens' councils, business, farming, fishing, industry, recreational users and environmental citizens groups.

MCBP used to convene a formal Citizens Advisory Committee to seek comments/ideas on annual work projects, present accomplishments such as mini grant results, and gather input on local issues of concern. The CAC has given way to a less formal but still effective effort to ensure that watershed residents are kept current on relevant issues through more frequent interaction with MCBP.

### Identified Stakeholder Groups

In addition to Worcester County, Maryland Coastal Bays Program (MCBP), and the MCBP Citizens Advisory Committee, other civic, environmental, business, university and government stakeholder groups have been identified. These include:



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- Town of Ocean City
- Town of Berlin
- Maryland Departments of Environment, Natural Resources, Planning, and Agriculture
- Worcester Soil Conservation District
- National Park Service (Assateague Island National Seashore)
- Assateague Coastal Trust
- Worcester County Farm Bureau
- Assateague Island Alliance
- Lower Shore Land Trust
- Ocean City Surf Club
- Surfrider Ocean City MD Chapter
- Worcester County 4-H
- Master Gardeners (University of Maryland Extension)
- Salisbury Bioenvironmental Science Club
- University of Maryland Eastern Shore
- Choptank Electric
- Delmarva Poultry Industry
- Ocean City Chamber of Commerce
- Ocean City Hotel and Restaurant Association
- Ocean City Green Team
- Ocean Pines Chamber of Commerce
- Homeowners' associations
- Realtor associations

### **Progress Communication**

Each year progress will be reported in MDE's NPS Program Annual Report, which is made available to the public on a website. Other special reports that are generated will be made available to the public.

### **Communications, Education and Outreach Materials**

The following are potential venues for communication, education and outreach regarding TMDL implementation:

- State of the Bays-a comprehensive report published every five years, based upon watershed status and trends, research findings, partner accomplishments and emerging issues of concern. (MCBP)
- Annual Report Card- updates on watershed status and major partner accomplishments. (MCBP)
- Press releases – MCBP and partner's BMP actions, volunteer opportunities, and educational information are promoted via local and regional official representatives, newspapers, television and radio stations, and Chambers of Commerce. Worcester County has a regular column that runs in local newspapers and issues general press releases as well. (MCBP and Worcester County)

- PSAs on local media- MCBP provides educational PSAs through the Town of Ocean City Public Access stations - two television stations and one radio FM station. (MCBP)
- Newsletter- MCBPs monthly digital newsletter is delivered to over 5,800 people and provides educational information and volunteer opportunities including information provided by our partners. (MCBP)
- Publications and brochures:
  - Worcester County has a variety of brochures on topics such as ditch management and maintenance, septic system maintenance, land conservation and restoration, which are displayed in offices, on the website and provided to citizens in various venues (Worcester County)
  - Conservation Choices for Maryland Farmers  
[http://mda.maryland.gov/resource\\_conservation/counties/ConservationChoices\\_2012\\_FINAL%20\(1\).pdf](http://mda.maryland.gov/resource_conservation/counties/ConservationChoices_2012_FINAL%20(1).pdf)
  - Maryland Agricultural Water Quality Cost Share Program  
[http://mda.maryland.gov/resource\\_conservation/Documents/RevisedMACSbochure.pdf](http://mda.maryland.gov/resource_conservation/Documents/RevisedMACSbochure.pdf)
  - Homeowner's Guide to the Coastal Bays- This publication provides information on how individuals impact water quality, including household pollutants, pet waste, septic systems and BMPs. (MCBP)
  - The Scoop on Dog Poop brochure (MCBP)
  - [Bay Friendly Program Brochure \(MCBP\)](#)

## Best Management Practices Sites Used for Education

There are several properties in the Coastal Bays watershed that are publicly accessible that contain examples of Best Management Practices, including, in many cases, interpretive signage or other materials. MCBP manages some of these properties and holds educational programs for elementary, middle and high school students and well as university students and researchers on site. In addition, we utilize volunteers at various restoration opportunities that involve education.

- [Bishopville Dam Removal and Fish Passage](#) (Bishopville, MD)- This innovative design, the first of its kind in the state, was created to allow the pond to be retained while letting fish move upstream. The new design replaced the Dam with a series of pools, runs and weirs to create a more natural waterway with improved ecosystem functions, including fish passage and nutrient pollution reduction. As a result, this project opened up 7 miles of upstream spawning habitat.
- [Lizard Hill Wetlands Restoration](#) (Bishopville, MD)- The 37-acre site, with approximately 450 ft. of shoreline is owned by the Town of Ocean City. It was previously used as a municipal and rubble landfill from 1954 – 1980. The area has since been cleaned of toxic materials and was cleared by MDE in 2007 for public use, which is limited to the designated area. This area has been planted as a shoreline restoration site.

- Ilia Fehrer Nature Preserve (Berlin, MD) - This forested property on Ayres Creek is owned by Worcester County and managed by the MCBP. It was previously managed for timber production and is currently being restored to native woodland. Eventually walking and riding trails will be accessible to the public.
- Grey's Creek Nature Park (Bishopville, MD) - This forested property on Grey's Creek and Assawoman Bay, that also contains extensive tidal marsh, is also being restored to native woodland and will be available to the public for passive access. A portion of shoreline has been converted from bulkhead to a living shoreline. This property is also owned by Worcester County and managed by the MCBP.
- Various boat ramps - Public Landing and Gum Point boat ramp contain examples of BMPs.

## **Citizen Participation**

### ***Volunteers***

In FY 2019 (September 2018 – October 2019), approximately 1,000 volunteers completed more than 4,500 hours including plantings, trash cleanups, oyster gardening, and water quality monitoring.

Volunteer opportunities targeting BMPs as well as nutrient and pollutant reduction will continue, especially as relates to CE 3.2.5; MCBP will develop, implement and expand public involvement and education projects or programs based on CCMP priorities, public interest, pollution prevention, resource availability, and other opportunities that arise. Priority goals for MCBP include decreasing nutrient loading throughout the watershed and implementing strategies to meet the TMDL reductions.

MCBP also coordinates Septic 101 presentations through the University of Maryland Extension Office.

### ***Private Landowners***

Worcester County will conduct outreach to landowners and/or stakeholders who have a direct stake in the implementation for areas where significant BMPs are anticipated. Input from these individuals will assist in assessing the feasibility of the proposed implementation.

Worcester County and MCBP will work with the Soil Conservation District and Natural Resources Conservation Service to make individual contact with farm owners and operators regarding agricultural BMP implementation as determined appropriate. The Lower Shore Land Trust may also be involved as relevant.

## **Public Meeting(s)**

Worcester County has worked to get organizational stakeholders involved early in the planning stages of the watershed plan. A meeting held December 9<sup>th</sup>, 2015 involved attendees from the Town of Ocean City, Worcester County, Town of Berlin, and Maryland Coastal Bays Program (MCBP). A planning meeting on March 17, 2016 was

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attended by representatives of Worcester County, Center for Watershed Protection, Worcester Soil Conservation District, Town of Ocean City, MCBP, University of Maryland Sea Grant Extension, EA Engineering/Town of Berlin, and the Maryland Departments of Planning (MDP), Agriculture (MDA), Natural Resources (DNR), and Environment (MDE).

The final draft of the plan will be available on the county website and linked from Maryland Coastal Bays Program's website and other websites or outreach media (such as newsletters) as appropriate. Worcester County will hold a public meeting or meetings to provide information about the drafted plan and seek feedback from citizens. The meetings will be advertised via the local news media. Input from the meetings will be considered in finalizing the plan (or individual watershed plans), and the final, adopted plan will also be available on the county's website and other local information sources.

Sources of information use to develop this section include:

EPA Handbook for Developing Watershed Plans to Restore and Protect Our Waters  
<https://www.epa.gov/polluted-runoff-nonpoint-source-pollution/handbook-developing-watershed-plans-restore-and-protect>

Worcester County, MD Volunteer Organizations - Environmental  
[https://www.co.worcester.md.us/departments/hr/volunteer/orgs?title=&field\\_city\\_value=&field\\_impact\\_area\\_tid%5B%5D=27](https://www.co.worcester.md.us/departments/hr/volunteer/orgs?title=&field_city_value=&field_impact_area_tid%5B%5D=27)

## Sections F/G. Schedule and Milestones

Limited information is available on specific candidate locations for the BMPs proposed in this plan for Assawoman Bay. MCBP has obtained grant funding from Maryland DNR to conduct a watershed targeting assessment for the Assawoman Bay and Isle of Wight watersheds to identify, evaluate and prioritize locations for stormwater retrofits, agricultural BMPs and stream/shoreline BMPs. This work will be completed in 2020 and the results will be used to refine the proposed suite of BMPs and develop a more detailed implementation schedule. Implementation efforts will focus primarily on Assawoman Bay, followed by Isle of Wight, Newport, and Chincoteague. The phased approach used for Assawoman Bay will be adopted for the remaining watersheds as well. Table 22 presents a schedule for achieving the measurable goals identified for this phased approach.

<b>Table 22. Measurable Goals for the Maryland Coastal Bays Watershed Plan</b>			
<b>Component</b>	<b>Measurable Goals</b>		
	<b>Short Term Phase (2020-2024)</b>	<b>Mid-Term Phase (2025-2029)</b>	<b>Long Term Phase (2030-2040)</b>
Watershed assessment and plan refinement	Assawoman Bay/Isle of Wight Bay assessment completed	Newport Bay and Chincoteague Bay assessments completed	N/A
Project implementation	103 septic conversions; 86.5 acres with SCWQMPs, 54.26 acres with core NMPs; and three demonstration BMPs in Assawoman Bay	Continue work on implementation in Assawoman Bay; begin work on implementation in Isle of Wight Bay	Complete implementation in Assawoman Bay; continue work on implementation in Isle of Wight Bay; begin work on implementation in Newport Bay and Chincoteague Bay
Load reductions	25% of load reductions achieved in Assawoman Bay	75% of load reductions achieved in Assawoman Bay; 25% of load reductions achieved in Isle of Wight Bay	100% of load reductions achieved in Assawoman Bay, Isle of Wight Bay, Newport Bay and Chincoteague Bay
Monitoring	Monitoring efforts will begin to show trends toward improvements	Monitoring efforts will show trends toward improvement	
Documentation of results	County/MCBP will develop spreadsheet tool for tracking results	County/MCBP will implement spreadsheet tool for tracking and reporting of results	

One of the most important measurable milestones is evidence of annual increases in BMP implementation, since BMPs decrease nutrient loads. In addition to tracking the numbers of BMPs, the spreadsheet tool for tracking BMP implementation described in Section H will also make it possible to estimate load reductions. The rate of annual increase should be enough to reach compliance with TMDL allocations.



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Another key set of measurable milestones includes chemical, physical and biological indicators of progress, including formal water quality standards as well as informal measures. The Maryland Coastal Bays Program conducts monitoring and tracks the progress of implementation of the Comprehensive Conservation and Management Plan. This includes having compliance standards for indicators and using the results of indicator monitoring to alert program participants to the latest trends and emerging environmental problems. Activities to measure chemical, physical and biological indicators of progress are described further in Section I.

In addition to the above milestones, the following ongoing, annual milestones for the activities proposed in this plan have been identified:

- Continue work to meet the Worcester County Water Resources Element goal of an additional 240 septic to sewer connections by 2025.
- Pursue funds from the Bay Restoration Fund for septic upgrades and hook ups to address additional potential septic to sewer connection projects that have already been identified by the County.
- Pursue grant funding for detailed watershed assessment of BMP opportunities in other priority watersheds.
- Coordinate and regularly communicate with MDA to secure funding for agricultural BMPs on an ongoing basis and track farmer installed and non-cost shared BMPs.
- Seek to maintain and increase funding for staff while seeking additional staff and resources using the 319 program and the National Estuary Program status of the Coastal Bays.
- Educate the public to modify their stormwater inducing behaviors, e.g. move downspout outlets from paved areas to grassed areas, in cooperation with the MCBP and jurisdictions in other states.
- Mitigate any future load increases by maximizing the use of Environmental Site Design on all new develop as per the Zoning and Subdivision Control Article.
- Continue and upgrade as necessary water quality monitoring efforts.
- Seek funding from sources such as Chesapeake Bay Trust and the Chesapeake and Atlantic Coastal Bays Trust Fund to implement urban and other BMPs.

While this plan does not address the a-i elements for the portion of the Assawoman Bay watershed in Delaware, there is a TMDL for the Delaware Inland Bays watershed including that portion draining to the Assawoman Bay. There are also pollution control strategies (PCSs) that are in state regulation in Delaware offering reasonable assurance that the milestones developed for the watershed can be identified and significant progress achieved. While the County would not be "tracking" the data for BMPs in Delaware, that information will be coordinated with Delaware and utilized to inform the "plan" in Maryland. This coordination would be explored through the partnership that exists with the Delaware Center for the Inland Bays and Maryland Coastal Bays Programs which are both part of the National Estuary Program.

Delaware watershed data, their programmatic efforts, and an established TMDL and a-i plan for the Little Assawoman watershed in the Inland Bays are in place. Maryland Coastal Bays and Delaware Inland Bays both have compatible Comprehensive

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Conservation Management Plans and suites of BMPs that are similar. There will be close coordination when the program develops two-year milestones to take the entire watershed into consideration. Both programs operate under the National Estuary Program umbrella, so it makes sense to coordinate with each other at that level. A recent letter (July 2019) submitted to Maryland MDE from the Delaware Non-Point Source Program indicates that Delaware will place a priority on the development of a management plan for the Little Assawoman Watershed within 12-18 months and will continue to work with MDE and MCBP to integrate relevant data.

## Section H. Load Reduction Evaluation Criteria

Overall, success of this watershed plan will be determined by the extent that the Maryland water quality standards for nutrients and sediment are met in previously impaired stream segments of the Maryland Coastal Bays watersheds. Water quality monitoring to document progress towards attaining water quality standards is described in Section I of this plan. Since there is often a lag time between BMP implementation and measurable water quality improvements, interim measures of success will include the extent of BMP implementation and estimates of the associated pollutant load reductions.

The County and MCBP will develop a spreadsheet tool for tracking BMP implementation that uses the pollutant load reduction crediting assumptions in this plan (see Appendix C) to estimate the associated pollutant load reductions. The tool will include two major components: 1) a BMP implementation tracking component for all planned agricultural, urban, septic and other BMPs in the TMDL watersheds, and 2) a pollutant load reduction calculation component that quantifies pollutant load reductions relative to the required reductions.

Tracking the installation of a large group of restoration projects led by numerous partners within a watershed can be a complex enterprise. BMP data collected by different watershed stakeholders is often provided in a variety of formats and may not contain the necessary information to estimate pollutant load reductions. The spreadsheet tool will provide a consistent method of reporting that includes all the necessary data inputs for estimating pollutant load reductions and will be developed with input from watershed stakeholders. Coordinating with key stakeholders such as MDA and the Town of Ocean City will ensure that these partners are engaged in the reporting process and that the spreadsheet tool ties in with existing data collection and reporting procedures so that reporting is not burdensome for these entities. The County and MCBP will also devise a process for housing and collecting data inputs for the spreadsheet tool so that progress can be reported on a regular basis and includes efforts by agencies, non-profits, universities and other groups involved in BMP implementation.

The following process is recommended for determining if the plan needs to be revised:

After the first 2-5 years, BMP implementation tracking information can be compared with BMP implementation goals to determine when the goal has been achieved. If during this comparison it is shown that interim goals are not being met, a revision of the plan may be necessary. Because of groundwater lag times, and the lag time for riparian buffers to mature, ultimate water quality improvements will not be observed until several years after the control measures are fully implemented. USGS information regarding groundwater lag times should be consulted to estimate the groundwater lag time.

Tidal monitoring will account for ground water lag-times and climatic variability. This information will be compared to the tidal water quality standards.

If a new TMDL with new load limits is established, any changes in the reductions needed would require the Plan to be revised.

Criteria for updating the load reduction analysis include:

If the water quality does not meet standards, field validation of BMP implementation should be undertaken. If this BMP validation process verifies that the BMPs have been fully implemented, then the NPS reduction plan should be revised. This should include additional source assessments to ensure no significant sources of nutrients have been overlooked.

If the Chesapeake Bay Program research results in a change of BMP reduction effectiveness, then the NPS reduction analysis should be updated to reflect those changes.

If new information becomes available that demonstrates the water quality standards need to be revised, then that information should be documented and provided to MDE's Science Services Administration. Several specific criteria are:

If water quality standards change, then the TMDL should be considered for revision.

If a significant error is found in the TMDL analysis, then it should be considered for revision.

If NPS reduction analyses indicate it is infeasible to achieve the water quality standards, and it is infeasible to reduce point sources, then the validity of the TMDL analysis should be assessed. If the analysis is validated, the water quality standards should be revisited.

## Section I. Monitoring Component

EPA has broad goals for monitoring to occur at appropriate sites, collecting appropriate parameters, at an appropriate frequency so that real-world implementation progress can be measured over time. For a plan with TMDL goals, monitoring outputs of at least two general types should be included:

1. Tracking and reporting the management measures that are implemented and the estimated pollutant load reductions achieved, and
2. Water quality monitoring for the TMDL parameters in each watershed and/or subwatershed that has a TMDL.

Water quality conditions, species abundance and richness, and habitat quality are routinely monitored in the Maryland Coastal Bays watershed. A deliberate and well-planned monitoring scheme not only provides a compendium of programs and results but also can be mined for changes over time and space (i.e. are we losing or gaining

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wetland acres). The Comprehensive Conservation and Management Plan for Maryland's Coastal Bays (CCMP) outlines monitoring actions for the watershed. There are forty-four monitoring action items in the CCMP. Of these forty-four actions, thirty-one of them are currently being addressed. The monitoring actions that have been initiated are presented in Table 23. Monitoring actions that have not started yet but are pending are presented in Table 24.

**Table 23. Monitoring Action Items in the CCMP That Have Been Initiated**

<b>Action Item</b>	<b>Category</b>	<b>Lead Partner</b>	<b>Outputs (deliverables)</b>	<b>Outcomes (knowledge &amp; behavior)</b>
WQ 3.1.5 DNR will compile the results and determine trends in air pollution inputs from the National Atmospheric Deposition Program monitoring site on Assateague Island. Disseminate information via the "State of the Bay" report every five years.	Research & Ecosystem Assessment	DNR	Air pollution data analysis and trends	Data provides feedback on air pollution reduction policies and programs.
FW 1.1.2 DNR will continue to provide data needed for stock assessments via the Coastal Bays Fisheries Investigation Surveys. Data include finfish, macroalgae, offshore trawl data, seafood dealer port sampling, volunteer angler summer flounder surveys, etc.).	Within Existing Resources	DNR	Annual updates on stock status	Assessment, monitoring and reporting on the status of fishery resources and impacts on them.
FW 1.1.3 DNR will provide annual updates on the stock status of key fish species in relationship to established targets and thresholds.	Research & Ecosystem Assessment	DNR	Annual trends & status reports that relate to thresholds and targets from a designated baseline year(s).	Knowledge to support and predict sustainable harvests.
FW 1.2.1 DNR will annually complete a survey of the shellfish resources within Maryland's Coastal Bays.	Within Existing Resources	DNR	Shellfish surveys	Assessment, monitoring & reporting on impact
FW 1.4.5 DNR will continue to work with recreational and commercial stakeholders to ensure that services provided to each sector, (such as monitoring stock assessments, harvest monitoring and outreach, etc.,) are recovered from each sector.	Within Existing Resources	DNR	Balanced Fisheries budget	Improved understanding of the function of the Fisheries Service.
FW 1.5.7 DNR will provide information regarding Highly Migratory Marine Species (population estimates, sustainable harvest, economic value of local tournaments, protection efforts).	Within Existing Resources	DNR	Linkages between bay and ocean ecosystems	Public awareness. Tie near-shore and off-shore data together for adaptive management.
FW 3.1.2 DNR will characterize the health of streams within the Coastal Bays watershed.	Within Existing Resources	DNR	Coastal Bays Streams Characterization Report, data	Status of local streams, StreamStat,

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**Table 23. Monitoring Action Items in the CCMP That Have Been Initiated**

Action Item	Category	Lead Partner	Outputs (deliverables)	Outcomes (knowledge & behavior)
			for Terrestrial Monitoring Plan	State of the Coastal Bays.
FW 4.1.3 DNR (Coastal & Chesapeake Services) and MARCO, the Mid-Atlantic Regional Council for the Ocean, will characterize critical offshore habitat, migratory pathways, biological populations and ecological processes.	Research & Ecosystem Assessment	DNR	Data posted to the MARCO Portal and a characterization report for managers and the public.	Information for long term ecosystem-based management.
WQ 1.6.6 MCBP STAC will investigate changes to water quality parameters (nutrients, sediment, harmful algal blooms, etc.) that affect the Coastal Bays through inlet flushing.	Research & Ecosystem Assessment	MCBP	Analysis and reports of water quality exchanges with the ocean	Recommendations for monitoring to better understand ecosystem linkages.
FW 1.5.1 DNR and MCBP will protect horseshoe crab populations by promoting the protection of bay beaches and other bottom habitats and promote volunteer monitoring of spawning populations throughout the coastal bays.	Within Existing Resources	MCBP	Annual spawning survey report	Protection of beach habitats, public stewardship & involvement, HSC management plan data.
FW 1.5.3 MCBP will continue terrapin counts and promote the use of cull rings and Turtle Exclusion Devices (TEDs) on all recreational pots. Data will be shared with the Terrapin Work Group.	Research & Ecosystem Assessment	MCBP	Terrapin counts & promotion of excluders for retailers/public	Increased public participation & stewardship, improved population estimates.
FW 1.5.8 MCBP will continue to assist the Marine Mammal Stranding Program, the National Aquarium, DNR and other groups with local educational and volunteer efforts (ex. seal sightings, dolphin counts, Coastal Clean-ups, etc.)	Education & Outreach	MCBP	Data and education & outreach products	Coordination with partner efforts, shared data. Increased public stewardship & volunteer opportunities.
FW 2.1.2 MCBP, DNR, MDE and NPS will ground-truth SAV beds during routine monitoring or other on-the-water efforts.	Within Existing Resources	MCBP	Acres & extent of sea grasses	Resource sharing & coordination.
FW 2.2.2 MCBP will continue to assist DNR with near shore species and habitat monitoring (including colonial nesting birds, horseshoe crabs, terrapins, shorebirds, sea turtles, waterfowl, marsh birds, mosquito ditch restoration, vegetation, etc.)	Within Existing Resources	MCBP	Biometric data	Monitoring assistance.
FW 3.1.1 MCBP will facilitate discussions with USGS and MGS to fully fund the watershed's two stream gauges at Birch Branch and Bassett Creek. The long-	Policy Issue	MCBP	MOU to fully fund stream gauge stations and/or a	Decreased nutrient and bacteria levels to meet TMDL



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**Table 23. Monitoring Action Items in the CCMP That Have Been Initiated**

Action Item	Category	Lead Partner	Outputs (deliverables)	Outcomes (knowledge & behavior)
term data sets generated by these gauges are necessary for determining water and nutrient budgets as well as supporting project evaluation and ecosystem changes.			commitment to secure funding	allocations and/or state water quality criteria. Ecosystem response evaluation for watershed changes due to projects and climate.
FW 3.1.6 MCBP will continue annual stream surveys for water quality and rapid assessment of habitat conditions. Special consideration will be given to biometrics and chemistry spectrums in brackish, tannic and freshwater habitats.	Research & Ecosystem Assessment	MCBP	Data for state and local consideration	Stream health monitoring.
FW 3.3.5 MCBP will promote citizen participation in the Audubon Christmas Bird Count, eBird compilations, Backyard Bird Count, Project Feeder Watch and Breeding Bird Surveys.	Within Existing Resources	MCBP	Species counts	Citizen involvement.
FW 3.3.6 MCBP will continue to train volunteers and promote annual herpetology surveys for field data compilation, targeted conservation and community stewardship.	Within Existing Resources	MCBP	Species counts for Herp Atlas	Citizen involvement.
FW 3.3.9 Where appropriate, MCBP will coordinate volunteer efforts to assist with tree planting, non-native species removal, buffer planting and monitoring of projects for long term success evaluation.	Within Existing Resources	MCBP	Citizen involvement	Evaluation of habitat improvement success.
FW 4.1.2 MCBP and partners will collect, manage and share GIS data layers that are publicly available for the watershed.	Within Existing Resources	MCBP	Data layer inventory	Spatially related decision making.
FW 4.2.1 MCBP will compile all CCMP actions that are categorized as Research and Ecosystem Monitoring for STAC review and input. Identify roles and responsibilities for partners and a research schedule.	Within Existing Resources	MCBP	CCMP related STAC Science Agenda	Process for identifying research needs.
FW 4.2.4 MCBP will produce and distribute Report Cards that provide updates on watershed status and major partner accomplishments.	Education & Outreach	MCBP	Report Cards on the health of Coastal Bays	Improve community feedback.
FW 4.2.5 MCBP STAC and partners will publish a comprehensive State of the Bays report every five years. The reports are based upon watershed status and trends, research findings, partner accomplishments and emerging issues of concern.	Within Existing Resources	MCBP	State of the Bays Report	Record and review changes over time.

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**Table 23. Monitoring Action Items in the CCMP That Have Been Initiated**

Action Item	Category	Lead Partner	Outputs (deliverables)	Outcomes (knowledge & behavior)
CE 2.2.11 MCBP STAC will track changes in the ecosystem from climate change through monitoring chemical, ecological and spatial trends.	Research & Ecosystem Assessment	MCBP	Indicator species, chemical parameter and range of physical changes in the ecosystem	Data and trends will be useful for predictions and projections of future conditions. Use information for adaptive management.
WQ 2.1.5 NPS-ASIS will continue to pursue saltmarsh restoration and monitoring projects such as ditch plugging and filling, marsh elevation studies, and nekton monitoring to restore natural conditions and document long term changes within salt marshes along Assateague Island.	Within Existing Resources	NPS	Summary of natural salt marsh status and trends, including monitoring of PCBs, PAHs and DDT	Restore saltmarsh hydrology and ecological function, build resiliency, document long-term change.
FW 3.3.2 NPS will continue to monitor barrier island threatened and endangered species including piping plover ( <i>Charadrius melodus</i> ), seabeach amaranth ( <i>Amaranthus pumilus</i> ), sea turtles and tiger beetles ( <i>Cicindelinae</i> ).	Research & Ecosystem Assessment	NPS	Information and annual reports	Conservation and population trends of threatened and endangered species.
FW 4.2.3 NPS, DNR and MCBP will continue to collaborate and maintain bay water quality monitoring programs to assess nutrient loading and living resource responses.	Research & Ecosystem Assessment	NPS	Spatially related estuarine water quality data	Ecosystem stressors and biotic impacts. Leveraging of limited resources to prevent duplication of effort.
WQ 1.2.3 USGS and NPS will investigate funding resources to continue monitoring nutrient inputs to the Coastal Bays from groundwater. They will study variations in nitrogen concentrations and residence times along surficial groundwater flow paths. This work will provide information on the effects of land use on water quality and provide a basis for planning for conservation areas.	Research & Ecosystem Assessment	USGS	Groundwater monitoring plan. Update the 1955 Mines & Water Resources Bulletin referenced in WC Water Resources Element	Assess flow volumes, groundwater age, and percentage nutrient contribution by land use sector.
WQ 1.1.6 WC and MDE will work cooperatively on incentives or other programs to encourage the use of Best Available Technology for enhanced nitrogen removing septic systems with appropriate monitoring and maintenance schedules.	Education & Outreach	WC	Funding or other incentives that may be leveraged for enhanced nutrient removing septic systems	Funding value leveraged over time, net increase in best available technology systems versus the net decrease in

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**Table 23. Monitoring Action Items in the CCMP That Have Been Initiated**

Action Item	Category	Lead Partner	Outputs (deliverables)	Outcomes (knowledge & behavior)
				nutrient pollution.
FW 3.3.1 DNR Wildlife & Heritage Service will characterize the terrestrial areas within the Coastal Bays watershed using existing indicators, monitoring data and game harvest information. Data will include colonial water bird nesting sites, bird migratory stopover areas, presence & abundance of rare & endangered species, location & productivity of terrapin nesting beaches and natural communities.	Research & Ecosystem Assessment	DNR	Data for Coastal Bays Terrestrial Monitoring Plan	Wildlife characterization. Project areas and priorities change over time in sensitive habitats and species.
FW 4.1.1 MCBP STAC will hold workshops to formally adopt the Coastal Bays Terrestrial Monitoring Plan. The plan will consist of a 3-tiered approach: landscape/GIS assessment, rapid site assessment and field surveys. A monitoring frequency schedule, a list of indicators and responsible parties will be produced. Finding will be incorporated into the five-year Coastal Bays Ecosystem Health Assessment Reports.	Research & Ecosystem Assessment	MCBP	Detailed offerings of enhancement techniques	Project areas and priorities.
FW 3.2.2 DNR will use current high-resolution imagery to assess forest and tree cover.	Research & Ecosystem Assessment	DNR	Mapping exercise	Data on change in percent forest cover over time.
CE 3.1.4 DNR will explore the feasibility and potential of expanding precipitation chemistry parameters at the National Atmospheric Deposition site at Assateague State Park to include greenhouse gases. Consider the utility of collecting data for carbon dioxide, ozone, particulates, nitrous oxides, methane, fluorinated gases, etc. Assateague NPS will continue to operate the NADP site which is part of the partnership between NPS, DNR and Worcester County.	Research & Ecosystem Assessment	DNR	Status and trends of atmospheric deposition since 2000. Expanded monitoring parameters to measure change over time.	Reduction in greenhouse gases (25% by 2020 GGRP).

**Table 24. Monitoring Action Items in the CCMP That are Pending**

Action Item	Category	Lead Partner	Outputs (deliverables)	Outcomes (knowledge & behavior)
FW 3.2.1 DNR (ad hoc forest committee) will use the most current GIS layer of Forest Interior Dwelling Species (FIDS) to determine forested parcels that are 50 acres or more in size, with at least 10 acres of FIDS habitat. Calculate canopy	Research & Ecosystem Assessment	DNR	Data for Terrestrial Monitoring Plan, FIDS layer	Multiagency coordination.

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**Table 24. Monitoring Action Items in the CCMP That are Pending**

Action Item	Category	Lead Partner	Outputs (deliverables)	Outcomes (knowledge & behavior)
cover, composition and stream widths through field surveys.				
FW 3.3.4 USDOJ and DNR will compile information for forest interior songbirds, neotropical migrants, colonial water birds, waterfowl and shorebirds in the watershed from existing databases and produce a status and trends report as well as habitat improvement recommendations.	Research & Ecosystem Assessment	DNR	Status & Trends report for birds	Change in acres designated for habitat services.
WQ 1.6.5 EPA will provide environmental data and analyses collected offshore to inform coastal researchers and local decision-makers about nutrient loading dynamics, particularly from ocean wastewater outfalls.	Within Existing Resources	EPA	Ecosystem data & reports	Integration of off-shore federally collected ecosystem data.
WQ 1.1.4 MCBP and WC will develop a program to ensure regular pump-outs and maintenance of residential septic systems. Septic haulers will provide electronic reporting on pumping activity for tracking and monitoring purposes as well as certifications that septic systems are functioning properly. WC will mail notices to homeowners & use the septic tracking system to monitor the volume of septage treated. MCBP will develop educational materials linking septic nutrients to watershed eutrophication.	Education & Outreach	MCBP	Pump out notices and other educational materials that explain the role of septic systems in rural areas and their potential for pollution	Increased number of pump outs.
WQ 3.1.2 MCBP will ask EPA (Office of Water) to assist Program efforts by conducting a Recovery Potential Screening for the Coastal Bays. The screening process will be based on ecological, stressor and social indicators, and measured by landscape datasets, impaired water attributes and monitoring data to prioritize restoration projects.	Research & Ecosystem Assessment	MCBP	Recovery Potential Screening Report for the Coastal Bays	Priority planning for conservation or restoration projects.
FW 2.2.8 MCBP will work with EPA, NOAA, ACOE and UMCES to develop "user-friendly" indicators of storm severity (ex. hours/days above predicted high tide, king tide affects).	Within Existing Resources	MCBP	Storm severity indicators	Coastal Resiliency information.
FW 3.1.7 MCBP and MCC-Assateague will participate in Stream Wader collection opportunities as they become available through DNR.	Research & Ecosystem Assessment	MCBP	Data for state and local consideration	Stream health monitoring and volunteer participation.
FW 2.3.6 MDE will review known local wetland gains (mitigation & creation) and net loss (permitting) since 2000. Track tidal and non-tidal impacts & gains and maintain a list of previous and future restoration sites.	Within Existing Resources	MDE	Local tracking of ongoing net loss or gain, compare impact data to MDE	Indicator for the 10,000 acre goal attainment.

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**Table 24. Monitoring Action Items in the CCMP That are Pending**

Action Item	Category	Lead Partner	Outputs (deliverables)	Outcomes (knowledge & behavior)
			authorization records	
FW 2.3.7 MDE will annually monitor and report on the success of wetland mitigation sites and compile the most current wetland inventory for the Coastal Bays. The inventory will include voluntary and mitigated wetland gains and losses over time.	Research & Ecosystem Assessment	MDE	Ecological monitoring, updated wetland inventory	Return on investment for mitigation dollars. BMP cost estimates will be used for project planning.
WQ 1.2.4 NPS will identify baseline groundwater conditions and develop a protocol to monitor and assess changes in the island's ground water resources related to climate variability.	Research & Ecosystem Assessment	NPS	Status and trends of Assateague Island groundwater resources	Ecosystem prediction and response.
WQ 2.1.7 WC will continue to hold hazardous waste disposal programs for farm and residential hazardous materials, including pesticides and fouled gasoline.	Within Existing Resources	WC	Indicator tracking: Volume & types of waste collected	Program evaluation, fish tissue & sediment monitoring for toxins, pharmaceuticals, and household products.

Comments from EPA on the previous version of this plan noted that Table 23 and Table 24 represented partner obligations but lacked specific detail to satisfy the full requirements of the EPA's monitoring criteria for a-i plans (USEPA, 2008). The detail specifically requested is provided by Table 25, which identifies who is conducting the monitoring, what constituents are being monitored and the frequency of monitoring.

**Table 25. Water Quality Monitoring Efforts in the Coastal Bays**

Organization	Analysis	Sites	Locations	Sampling Dates
Assateague Coastal Trust	Dissolved Oxygen (DO), pH, temp, salinity, water clarity; bacteria - Enterococci	7	Ayers Creek, Isle of Wight Bay, St. Martin River, Turville Creek, Herring Creek,	May - September; Weekly Sample
Assateague Island National Seashore	DO, pH, chlor <i>a</i> , turbidity, temp, salinity	3	Chincoteague, Sinepuxent bays	Continuous Monitor, March - November, Every 15 minutes
Assateague Island National Seashore	Temp, water depth, DO, conductivity, pH, secchi depth, wind speed and direction, light attenuation,	18	Sinepuxent, Newport, Chincoteague (MD/VA) bays	Yearlong; Monthly

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**Table 25. Water Quality Monitoring Efforts in the Coastal Bays**

Organization	Analysis	Sites	Locations	Sampling Dates
	nutrients, chlor <i>a</i> , <i>b</i> , <i>c</i> , TSS, pheo <i>a</i>			
Department of Natural Resources	DO, water temp, pH, water clarity, salinity,	15	St. Martin River, Assawoman, , Isle of Wight, Sinepuxent, Newport, Chincoteague bays	Yearlong; Monthly
Department of Natural Resources	DO, temp, pH, water clarity, salinity, turbidity, chlor <i>a</i>	4	St. Martin River, Chincoteague, Newport, Assawoman bays	Continuous Monitor
Maryland Coastal Bays Program	Nutrients, DO, pH, temp, salinity, chlor <i>a</i>	23	St. Martin River, Assawoman, , Isle of Wight, Sinepuxent, Newport, and Chincoteague bays	Yearlong; Monthly
Maryland Coastal Bays Program Spring Sampling	Nutrients, DO, chlor <i>a</i>	61	Assawoman, St. Martin, Isle of Wight, Sinepuxent, Newport, Chincoteague bays	Annually, April
NOAA	Water & air temp, wind direction and speed, water level, barometric pressure	1	Sinepuxent Bay	Continuous Monitor
Worcester County	bacteria-Enterococci	5	Sinepuxent Bay, Ocean side of Ocean City and Assateague, Public Landing	May-September; Monday, Tuesday, Wednesday

The water quality monitoring efforts within the Coastal Bays watershed are conducted by six organizations. Additional monitoring efforts include submerged aquatic vegetation (SAV) and brown tide monitoring. Through a partnership with Maryland Coastal Bays Program (MCBP), Virginia Institute of Marine Science (VIMS), and the Department of Natural Resources (DNR), aerial surveys are done annually to determine the presence of SAV. MCBP provides additional field monitoring to verify the accuracy of the data. DNR maintains the database for this information, which is used in the State of the Bays and annual Coastal Bays Report Card. MCBP and DNR, in partnership with Stony Brook University, monitor for brown tides, a type of harmful algal bloom (HAB), within the Coastal Bays.

Additional concerns of EPA in the first draft of this plan inquired as to how the monitoring being done will show trends in water quality so plan implementers can show that they are meeting goals. Since the fall of 2017, Worcester County, MCBP and MD DNR have been engaged in conversations to inform both EPA and MDE that specific monitoring is taking place to demonstrate adequate sampling frequency, constituencies measured, where monitoring is taking place, and that monitoring is taking place at the watershed scale.



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MCBP works with partners in the Science Technical Advisory Committee (STAC) chaired by Dr. William Dennison at University of Maryland's Center for Environmental Science, to ensure that monitoring data for both biological and water quality indicators are synthesized into a comprehensive watershed health score for each sub watershed in Maryland's Coastal Bays. This data is available through MD DNR and UMCES web portals and is updated annually.

<https://ecoreportcard.org/report-cards/maryland-coastal-bays/health/>

The recent 2017 report card for the Coastal Bays has demonstrated trends in water quality in the Assawoman Bay sufficient to provide for a change in the overall composite score for the watershed from 49.7 in 2015, 56.4 in 2016 to 55.3 in 2017. Scores for total phosphorus and chlorophyll-a had improved substantially accounting for the improvement from 2015 to 2016 but increases in total nitrogen and decreases in hard clam density from 2016 to 2017 resulted in a decrease in the total health index for Assawoman Bay (Appendix D).

DNR has recently provided a detailed map of monitoring stations in the Assawoman Bay as well as other Bays at the sub-watershed scale (Appendix E). DNR has also provided a comprehensive spreadsheet of all monitoring data that should prove sufficient documentation to satisfy that the monitoring program in the Assawoman Bay is more than adequate (Appendix F).

MCBP has an EPA approved Quality Management Plan (QMP) (Appendix G) for all operations related to data collection within the program. There is also a Quality Assurance Project Plan (QAPP).

EPA indicated to Worcester County and MCBP in March of 2018 that the data and monitoring points in the "ecoreport" card will be very helpful implementing the plan. MCBP clarified in the plan how those data are collected annually and incorporated into the interactive website.

## References

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## Appendix A. Point Sources

### Point Sources of Impairment in the Maryland Coastal Bays Watersheds

Point sources in the watersheds include municipal wastewater treatment plants (WWTPs), industrial facilities, injection wells, spray irrigation facilities and concentrated animal feeding operations (CAFOs). Currently there are no NPDES-regulated MS4 stormwater permits in the Maryland Coastal Bays watershed (MDE, 2014).

Within the Maryland Coastal Bays watershed, the following point sources were identified in the 2014 Maryland Coastal Bays TMDL document:

- Five municipal Wastewater Treatment Plants (WWTPs) with surface discharge NPDES permits: Newark WWTP, Ocean Pines WWTP, Assateague Island National Seashore WWTP, Berlin WWTP, and Ocean City WWTP. The Ocean City WWTP discharges into the Atlantic Ocean not to the Maryland Coastal Bays watershed, and the Berlin WWTP discharged via spray irrigation as part of its process, and these fields are located in the Upper Pocomoke River watershed.
- Five spray irrigation facilities: Riddle Farm WWTP, Grays Corner WWTP, Lighthouse Sound WWTP, Assateague Pointe WWTP, River Run WWTP, and Perdue Farms.
- Two injection well facilities: The Mystic Harbor and The Landings.
- Two industrial point sources: Kelly Foods Corporation, and Berlin Properties North, LLC.
- Twenty-two CAFO operators that filed notices of intent to apply for permits under Maryland's CAFO or Maryland Animal Feeding Operations (MAFO) regulations.

Table A-1 shows the point sources located in Maryland and included in the 2014 TMDL as well as the associated loads for nitrogen and phosphorus from those sources. The Ocean City WWTP is not included in the table because its effluent is discharged to the Atlantic Ocean. Table A-2 shows the baseline CAFO loads for each of the TMDL watersheds in the Coastal Bays in Maryland.

Table A-1: Average daily flows and estimated annual TN and TP loads for process water point sources discharging into the Maryland Coastal Bays modeling domain, 2001 – 2004 (MDE, 2014)					
MD Watershed	Facility	Type	Average Flow [Million gallons per day(MGD)]	Estimated Delivered TN Load [pounds per year (lbs/yr)]	Estimated Delivered TP Load (lbs/yr)
Assawoman Bay	Lighthouse Sound WWTP	Spray Irrigation	0.038	183	0
Isle of Wight Bay	Ocean Pines WWTP	Municipal	0.9	10,093	867
	River Run WWTP	Spray Irrigation	0.11	2,614	0
	Perdue Farms, Inc.: Showell Facility	Industrial	0.63	5,279	193

**Table A-1: Average daily flows and estimated annual TN and TP loads for process water point sources discharging into the Maryland Coastal Bays modeling domain, 2001 – 2004 (MDE, 2014)**

MD Watershed	Facility	Type	Average Flow [Million gallons per day(MGD)]	Estimated Delivered TN Load [pounds per year (lbs/yr)]	Estimated Delivered TP Load (lbs/yr)
	Perdue Farms – Bishopville Hatchery	Spray Irrigation	0.004	549	0
	Riddle Farm WWTP – outfall 001	Spray Irrigation	0.0576	0	0
	Riddle Farm WWTP – outfall 002	Spray Irrigation	0.198	0	0
Newport Bay	Berlin WWTP	Municipal	0.070	751	14
	Newark WWTP	Municipal	0.039	1,034	300
	Berlin North WWTP	Industrial	0.044	5,378	484
	Kelly Foods Corporation	Industrial	0.006	112	2
Sinepuxent Bay	Assateague Island National Seashore	Municipal	0.004	662	191
	Assateague Pointe WWTP	Spray Irrigation	0.042	367	0
	The Mystic Harbour	Injection Well	0.103	853	0
	The Landings	Injection Well	0.10	0.00	0

**Table A-2. Baseline CAFO Loads in Maryland Coastal Bays watersheds\***

TMDL Segment	Acres	Baseline (lbs/yr)	
		TN	TP
Greys Cr	10	2050	181
Bishopville	42	8539	753
Shingle Landing	20	4105	362
St. Martin	4	820	72
Turville Creek	11	2259	199
Ayer Creek	8	1619	143
Newport Creek	13	2660	234
Marshall Creek	17	3400	300
Newport Bay	8	1550	137
Chincoteague	63	12818	1130

\*CAFO data provided by Jeff White from MDE.

## Management Measures Implemented Since the TMDL Baseline

Of the point sources identified in the Maryland Coastal Bays TMDL, several have been modified to either reduce or eliminate their nutrient discharges. These facilities and their discharge status are summarized in Table A-3.

Several process point sources are either no longer in operation or have been converted to spray irrigation. The Purdue Farms Bishopville Hatchery has been demolished. In addition, the Assateague Island National Seashore WWTP was converted to a wetland system and the Berlin WWTP was converted to spray irrigation, with the fields located in the Pocomoke River watershed outside of the Coastal Bays. The nitrogen and phosphorus load reductions attributed to the closure of these facilities was assumed to be equivalent to the delivered loads estimated in the TMDL by MDE (2014a). One exception was the Assateague Island National Seashore WWTP, which was converted to a wetland system. No information was available on the nutrient load from the wetland system; therefore, it was conservatively assumed that the WLA assigned to this plant represented the discharge associated with conversion to the wetland system. Therefore, the reductions credited to this facility were calculated as the delivered load minus the WLA.

**Table A-3. Process water point source facilities in the County that have reduced/eliminated their nutrient loads**

<b>Tidal Basin/TMDL Watershed</b>	<b>Facility</b>	<b>Type</b>	<b>Permit #</b>	<b>Status</b>
Isle of Wight Bay/ Bishopville Prong	Purdue Farms Inc- Bishopville Hatchery	Spray Irrigation	DP0814	Facility demolished
Newport Bay/Ayers Creek/Kitts Creek	Berlin WWTP	Municipal WWTP	MD0022 632	Converted to spray irrigation – discharges outside the Coastal Bays watershed
Sinepuxent Bay	Assateague Island National Seashore WWTP	Municipal WWTP	MD0021 091	Converted to Wetland System
Isle of Wight Bay/ Shingle Landing Prong	Purdue Farms Showell Complex	Surface Discharge	-	Facility is not currently active. The permit is active and administratively extended with a reserved allocation.
Newport Bay /Ayers Creek/Kitts Creek	Berlin North WWTP	Surface Discharge	-	Facility is not currently active. The permit is active and administratively extended with a reserved allocation.



The Purdue Farms Showell Complex and the Berlin North WWTP are currently inactive but have active permits with reserved allocations. The Purdue Farms Showell Complex is not anticipated to be repurposed as a poultry processing plant. If any discharges from future industrial use occur at this facility, they would be minimal due to the requirement to use spray irrigation. It is also a possibility that future discharges from this site would be tied into the Ocean Pines WWTP, which would completely eliminate any discharges associated with the Purdue Farms Showell Complex. The nitrogen and phosphorus load reductions attributed to these facilities was assumed to be equivalent to the delivered loads estimated in the TMDL by MDE (2014a).

The 2014 Maryland Coastal Bays TMDL notes that there are 22 CAFO facilities that have submitted a notice of intent to apply for a permit. CAFO permits require instituting a Comprehensive Nutrient Management Plan that meets the Nine Minimum Standards to Protect Water Quality, which include: 1) ensure adequate storage capacity, 2) ensure proper management of mortalities to prevent the discharge of pollutants into waters of the State, 3) divert clean water, as appropriate, from the production area to keep it separate from process wastewater, 4) prevent direct contact of confined animals with waters of the State, 5) chemical handling, 6) conservation practices to control nutrient loss, 7) protocols for manure and soil testing, 8) protocols for the land application of manure and wastewater, and 9) record keeping. The general permit also prohibits the discharge of pollutants, including nutrients, from CAFO production areas, except as a result of events greater than the 25-year, 24-hour storm. Estimated TN and TP loads under TMDL conditions for these facilities were based on CAFO loading rates provided by MDE. However, these loads as well as the WLAs for CAFOs are provided on a watershed basis rather than by individual facility. As of May 2019, there are 28 permitted facilities in the watershed according to MDE's animal feeding operations search database, and an additional 16 facilities whose permits are pending approval. Reduction estimates assume that all CAFOs are now permitted and by meeting their permit requirements are also meeting the required load reductions (White, personal communication).

Table A-4 shows the reductions from the above-described process water modifications and Table A-5 shows the reductions from CAFOs.

Table A-4. Reductions from Process Water Facilities (2005-2019) Compared to Required Reductions					
Tidal Basin	TMDL Watershed	Reductions Achieved 2005-2019		Required Reductions	
		TN (lbs/yr)	TP (lbs/yr)	TN (lbs/yr)	TP (lbs/yr)
Assawoman Bay	Assawoman Bay	0	0	0	0
	Greys Creek	0	0	0	0
Isle Of Wight Bay	Isle Of Wight Bay	5,828.00	193	-33,769	-4,431
	Manklin Creek	0	0	0	0
	Herring Creek	0	0	0	0
	Turville Creek	0	0	0	0

Table A-4. Reductions from Process Water Facilities (2005-2019) Compared to Required Reductions					
Tidal Basin	TMDL Watershed	Reductions Achieved 2005-2019		Required Reductions	
		TN (lbs/yr)	TP (lbs/yr)	TN (lbs/yr)	TP (lbs/yr)
	St. Martin River	5,828.00	193	-11,936	-1,042
	Bishopville Prong	549	0	-106	0
	Shingle Landing Prong	5,279.00	193	-11,820	-1,042
Newport Bay	Newport Bay	6,129.00	498	-3,844	-1,187
	Newport Creek	0	0	0	0
	Marshall Creek	0	0	-2,802	-282
	Ayer Creek/Kitts Branch	6,129.00	498	-1,607	-1,076
Sinepuxent Bay	Sinepuxent Bay	552	180	-2,521	-11
Chincoteague Bay	Chincoteague Bay	0	0	0	0

\* Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

\*\* The required reductions for process water are negative because the TMDL allocations account for potential future increases or reinstatement of wastewater sources

Table A-5. Reductions from CAFO BMPs (2005-2019) Compared to Required Reductions					
Tidal Basin	TMDL Watershed	Reductions from Existing BMPs		Required Reductions	
		TN (lbs/yr)	TP (lbs/yr)	TN (lbs/yr)	TP (lbs/yr)
Assawoman Bay	Assawoman Bay	1,372	125	1,372	125
	Greys Creek	1,372	125	1,372	125
Isle Of Wight Bay	Isle Of Wight Bay	10,525	958	10,525	958
	Manklin Creek	0	0	0	0
	Herring Creek	0	0	0	0
	Turville Creek	1,512	138	1,512	138
	St. Martin River	9,013	820	9,013	820
	Bishopville Prong	5,716	520	5,716	520
	Shingle Landing Prong	2,748	250	2,748	250
Newport Bay	Newport Bay	6,179	562	6,179	562
	Newport Creek	1,781	162	1,781	162
	Marshall Creek	2,276	207	2,276	207
	Ayer Creek/Kitts Branch	1,084	99	1,084	99
Sinepuxent Bay	Sinepuxent Bay	0	0	0	0

**Table A-5. Reductions from CAFO BMPs (2005-2019) Compared to Required Reductions**

Tidal Basin	TMDL Watershed	Reductions from Existing BMPs		Required Reductions	
		TN (lbs/yr)	TP (lbs/yr)	TN (lbs/yr)	TP (lbs/yr)
Chincoteague Bay	Chincoteague Bay	8,582	781	8,582	781

\* Values shown for Assawoman Bay include those for Greys Creek; Values shown for Isle of Wight Bay include those for Manklin, Herring and Turville Creek and St. Martin River; Values shown for St. Martin River include those for Bishopville Prong and Shingle Landing Prong; Values shown for Newport Bay include those for Newport Creek, Marshall Creek and Ayer Creek/Kitts Branch.

### Future Proposed BMPs

Additional nutrient reductions from point sources may be achieved in the Marshall Creek watershed with the planned conversion of the Newark WWTP to spray irrigation; however, there is insufficient information at this point on the location, acreage and concentration of irrigation discharges to estimate the load reduction resulting from this conversion.

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## Appendix B. Calculation of Baseline Loads

To calculate the expected pollutant load reductions for this plan, the Maryland Load Allocations were subtracted from the nonpoint source baseline pollutant load in the Maryland portion of each TMDL watershed. Methods to determine the baseline loads are described here.

### Calculation of Baseline Loads for the TMDLs

The baseline loads presented in the Coastal Bays nutrient TMDL were calculated by MDE using a variety of modeling techniques, including the Hydrologic Simulation Program-FORTRAN (HSPF) watershed model as well as set of time-variable models, which constitute the Coastal Bays Eutrophication Model (CBEM), that was developed as the computational framework to link the sources of nutrient loadings to the DO criteria and chlorophyll a goals (MDE, 2014). The analysis was done by the Virginia Marine Institute in 2013 and published as *The Maryland Coastal Bays Watershed Modeling Report* (see MDE, 2013 for details on the data sources and model calibrations). Loading caps for total nitrogen and total phosphorus entering the Maryland Coastal Bays were established for both growing season and average annual flow conditions.

The HSPF model analyzed data from 199 watershed segments to estimate flows, suspended solids, and nutrient loads from the watersheds' sub-basins. The model timeframe spanned the period of 2000-2005. The TMDL analysis was conducted using the 2001-2004 period as a baseline, which includes dry, wet and average years. The Coastal Bays HSPF watershed model incorporated several sets of data from various sources, which were considered to be the best and most readily available data. A detailed description of the TMDL modeling is provided in *Total Maximum Daily Loads of Nitrogen and Phosphorus for Assawoman Bay, Isle of Wight Bay, Sinepuxent Bay, Newport Bay and Chincoteague Bay in the Coastal Bays Watersheds in Worcester County, Maryland* document (MDE, 2014).

For the 2002 Big Mill Pond TMDL, the phosphorus TMDL was based on two empirical methods known as the Vollenweider Relationship and Carlson's Trophic State Index that predict the degree of a lake's eutrophication as a function of the aerial phosphorus loading. R. A. Vollenweider established a linear relationship between the log of the phosphorus loading ( $L_p$ ) and the log of the ratio of the lake's mean depth ( $Z$ ) to hydraulic residence time ( $t_w$ ) (MDE, 2002). The document *Total Maximum Daily Loads of Phosphorus and Sediment to Big Millpond, Worcester County, MD* has detailed explanation of the methodology used for calculating Big Mill Pond phosphorus loads.

### Modification of TMDL Baseline Loads for this Plan

The Maryland nonpoint source baseline loads for each watershed were initially calculated by dividing up the total baseline load for each watershed using the percent of the load from each major source (including upstream sources) provided in the TMDL. Through discussions with MDE during the development of this plan, it was determined that the mixed agriculture baseline loads in the TMDL included both nonpoint source

agricultural runoff and CAFO loads, which are considered a point source. Therefore, the TMDL baseline loads were modified to more accurately represent the nonpoint sources. In addition, MDE confirmed that the nonpoint source baseline loads and load allocations from the TMDL should be adjusted to reflect the official policy of the MDE Water Management Administration for crediting reductions from septic system conversions (Jeff White, personal communication, April 1, 2019). Both modifications are described below.

MDE provided baseline loads from the TMDL modeling data as a more precise estimation than the percent of the load from each major source provided in the TMDL (Jeff White, personal communication, July 31, 2019). The CAFO baseline loads from the TMDL modeling data were then subtracted from the mixed agriculture baseline loads to determine revised baseline NPS agriculture loads.

The nitrogen loading rate for an individual septic system that was used in the TMDL is 30.4 lbs TN/yr. This value was updated to better align with MDE policy as described below. The Chesapeake Assessment and Scenario Tool (CAST) was used to determine that the edge-of-stream standard loading rate for a Worcester County septic system is approximately 7.3 lbs TN/system/year, corresponding to the Chesapeake Bay Program Phase 6 Watershed Model based on a 2010 No Action scenario. In order to calculate the septic loading at the edge-of-drain field, a 75% attenuation (25% transmission) was assumed using the Coastal Plain Lowlands hydrogeomorphic attenuation factors from TetraTech (2016). This resulted in a loading rate of 29.2 lbs TN/year for a typical residential septic system.

Table B-1 shows the assumptions used to estimate the nitrogen loads from septic systems for this plan. The number of septic systems per TMDL watershed shown in Table 3 of this plan and the assumptions in Table B-1 were used to determine the surface water delivered nitrogen load per septic system within and outside of the critical area. Please see MDE (2014) for the detailed analysis of the estimated load from Critical Areas.

Table 6: Assumptions Used in the Septic Load Analysis		
Nitrogen loading per septic (lbs/year)	29.2	
Nitrogen attenuation rate	within 1,000 ft of surface water (critical area)	greater than 1,000 ft from surface water (outside of critical area)
	0.2	0.7
Surface water delivered nitrogen load per septic with attenuation (lbs/year)	23.36	8.76

The Maryland portion of the nonpoint source baseline loads from the TMDL were adjusted to account for the updated septic system loading rate of 29.2 lbs TN/yr. While a similar order of magnitude to the 30.4 lbs TN/yr rate used in the TMDL, the revised rate

[REDACTED]

assures that pollutant load reductions from septic system BMPs are more accurately reflected in the required TMDL reductions

In order to determine a revised load allocation for septic systems, the reduction percentages between the septic baseline load and septic load allocation from the TMDL were calculated. These same reduction percentages were then applied to the revised septic baseline load to determine the revised septic load allocation. The reduction in the septic baseline load and allocation based on the revised loading rate were then subtracted from the total MD baseline load and MD load allocation so that updated load reduction requirements could be calculated.

## References

Maryland Dept. of the Environment (MDE). 2014. Total Maximum Daily Loads of Nitrogen and Phosphorus for Assawoman Bay, Isle of Wight Bay, Sinepuxent Bay, Newport Bay and Chincoteague Bay in the Coastal Bays Watersheds in Worcester County, Maryland. MDE, Baltimore, MD.

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## Appendix C. BMP Pollutant Load Reduction Crediting

This appendix documents the methods and assumptions used for quantification of pollutant load reductions associated with implementation of management measures identified in the plan.

### **Agricultural BMPs**

MDA provided a database of agricultural BMPs compiled at the tidal basin level. Since no spatial data was available, the total acres in each tidal basin were distributed to the TMDL watersheds based on the proportional area of agricultural land in each watershed. Pollutant load reductions were calculated for the agricultural BMPs as described below. For land use change BMPs, the TMDL baseline pollutant loads and acreages were used to develop a yield (lbs/acre) for each TMDL land classification (agriculture, urban, forest/barren, and water/wetlands). Unless otherwise specified, load reductions were based on the CBP nonpoint source crediting methodology (CBP, 2018).

### ***Animal Mortality Facility***

The MDA database included 70 animal mortality facilities. However, the CBP has not yet developed a crediting methodology for this practice. A CBP expert panel for this practice is currently in progress at the time of development of this plan and a crediting method may be available in the future that would allow nutrient and sediment reductions to be calculated.

### ***Conservation Cover***

Conservation cover refers to the establishment and maintenance of perennial vegetative cover to protect soil and water resources on agricultural land retired from production. This practice is equivalent to land retirement in the CBP methodology which calculates load reduction as a land use change. The credit for this plan was calculated as the difference in pollutant loading resulting from a conversion of agricultural land to the forest and barren category.

### ***Field Borders***

Field borders are borders or strips of perennial vegetation established at the outside edge of a field and are equivalent to grass buffers in the CBP crediting methodology. Load reductions are calculated as a land use change and buffers with a minimum width of 35 feet also receive a reduction in upland loads. The Coastal Plain Lowland physiographic province includes a TN reduction based on a 4:1 upland acre to buffer acre ratio and a 13% efficiency. TP is based on a 2:1 upland acre to buffer acres ratio and a 45% efficiency.

Field borders provided from MDA in units of linear feet. Per an email from Elizabeth Hoffman at MDA on 6/10/2019, field borders are converted from linear feet to acres by assuming a 35-foot border width. The credit for this plan was calculated as a land use change from the conversion of agricultural land to the forest and barren category. Since field border were assumed to have a 35-foot width, they also meet the requirement for a reduction in upland loads. The CBP upland efficiencies for the

Coastal Plain Lowland physiographic province were applied to the upland agricultural acres for this practice based on the upland acre to buffer acre ratios for TN and TP.

### ***Filter Strips***

Filter strips are areas of herbaceous vegetation situated between cropland, grazing land, or disturbed land, and environmentally sensitive areas. They are equivalent to grass buffers in the CBP crediting methodology, which is described above for field borders. According to the NRCS practice standard for filter strips, they have a minimum 30-foot width for dissolved contaminants and pathogens. The units of filter strips were included in the MDA database as acres and the width is unknown. In an effort to be conservative, the CBP upland efficiencies for grass buffers were not considered applicable for filter strips because the NRCS minimum width is below the 35-foot width requirement for grass buffer upland load reduction and because the width from the MDA database is unknown. Therefore, the credit for this plan was calculated as the difference in pollutant loading resulting from a conversion of agricultural land to the forest and barren category.

### ***Grassed Waterways***

Grassed waterways are natural or constructed waterways established in suitable vegetation, to safely convey water across areas of concentrated flow. They are equivalent to grass buffers in the CBP crediting methodology, which is described above for field borders. The units of grassed waterways were included in the MDA database as acres and the width is unknown. To be conservative, grassed waterways were assumed not to meet the 35-foot width requirement for the grass buffer upland load reduction. The credit for this plan was calculated as the difference in pollutant loading resulting from a conversion of agricultural land to the forest and barren category.

### ***Heavy Use Area Protection***

Heavy use area protection is the stabilization to protect an area on a farm which is being utilized frequently and intensively by livestock or farm equipment. This practice is equivalent to loafing lot management in the CBP crediting methodology that applies reduction efficiencies of 20% TN and 20% TP to the practice area. These reduction efficiencies were applied to the load from agricultural land calculated from the acres of heavy use protection in the MDA database.

### ***Riparian Forest Buffer***

Riparian forest buffers are areas of trees, woody shrubs and other vegetation located adjacent to and up-gradient of a water body. The CBP crediting methodology for forest buffers is similar to grass buffers but with different reduction efficiencies. Load reductions are calculated as a land use change and buffers with a minimum width of 35 feet also receive a reduction in upland loads. The Coastal Plain Lowland physiographic province includes a TN reduction based on a 4:1 upland acre to buffer acre ratio and a 19% efficiency. TP is based on a 2:1 upland acre to buffer acres ratio and a 45% efficiency.

The units of riparian forest buffers were included in the MDA database as acres and the width is unknown. However, a minimum width of 35 feet is included in the NRCS forest

buffer practice standard. The forest buffers included in the MDA database were assumed to meet this standard and therefore be eligible for the reduction in upland loads. The credit for this plan was calculated as a land use change from the conversion of agricultural land to the forest and barren category. The CBP upland efficiencies for the Coastal Plain Lowland physiographic province were also applied to the upland agricultural acres for this practice based on the upland acre to buffer acre ratios for TN and TP.

### ***Riparian Herbaceous Cover***

Riparian herbaceous cover is an area of herbaceous vegetation situated in the transitional zone between terrestrial and aquatic habitats. It is equivalent to grass buffers in the CBP crediting methodology, which is described above for field borders. According to the NRCS riparian herbaceous cover practice standard, a minimum width of 2.5 times the stream width (based on the horizontal distance between bank-full elevations) or 35 feet for water bodies is required to maintain or improve water quality. Riparian herbaceous cover included in the MDA database was assumed to meet the 35-foot requirement for upland load reduction as part of the grass buffer crediting methodology. The credit for this plan was calculated as a land use change from the conversion of agricultural land to the forest and barren category. The CBP upland efficiencies for the Coastal Plain Lowland physiographic province were also applied to the upland agricultural acres for this practice based on the upland acre to buffer acre ratios for TN and TP.

### ***Water Control Structure***

Water control structures convey water, control the direction or rate of flow, maintain a desired water surface elevation or measure water. The CBP crediting methodology applies a 33% TN reduction efficiency to the area treated by the structure and no credit for TP. The number of water control structures provided in the MDA database was converted to acres treated assuming one structure treating 26 acres per an email from Elizabeth Hoffman at MDA on 6/10/2019. The 33% TN reduction efficiency was then applied to the load from agricultural land based on the assumed acres.

### ***Roof Runoff Structure***

Roof runoff structures are a type of water control structure that collects, controls, and disposes of runoff water from roofs. It is equivalent to barnyard runoff control in the CBP crediting methodology that applies reduction efficiencies of 20% TN and 20% TP to the rooftop area. These efficiencies were applied to the load from agricultural land based on the acres of roof runoff structures reported in the MDA database.

### ***Waste Storage Facility***

The MDA database included 111 waste storage facilities. As part of the CBP crediting methodology, animal waste management BMPs reduce the amount of manure that is lost during manure storage. That manure becomes available to spread on crops. Thus, the load on the animal feeding operation and concentrated animal feeding operation load source decrease, but the load from manure on the crop land increases. In these cases, the fertilizer load may decrease, resulting in no change in nutrients on crop land. In situations where the entire crop need was already met by manure, the additional

manure is spread on crops following an algorithm where all manure is spread on crop and pasture land even in excess of crop nutrient requirements. Thus, animal waste management BMPs can result in higher loads on some load sources even as loads on animal feeding operations decrease.

Required information on how the manure is used was not available in the MDA database and appears most likely that the load reduction from the animal feeding operation would be offset by the increased load from manure on cropland. In addition, load reduction (or potential increase) associated with this practice is not easily calculated outside of a modeling simulation, such as the Chesapeake Assessment and Scenario Tool (CAST). Therefore, the impact of waste storage facilities was not incorporated into this plan.

### ***Wetland Creation/Restoration***

Wetland creation or restoration is an area of vegetated wetland to remove sediment, nutrients, organic matter and other pollutants from surface and ground water associated with agricultural operations. This is equivalent to the wetland creation and wetland restoration practices in the CBP crediting methodology, where creation is the establishment of a wetland on a site that was historically not wetland and restoration is the return of a former or degraded wetland to a condition that is a close approximation of its original condition. Both wetland creation and restoration are credited as a land use change. In addition, there is a reduction efficiency of 42% TN and 40% TP applied to upland acres treated by the wetland. For wetland creation, the number of upland acres that are treated by the reduction efficiency values is one upland acre per acre of wetland creation. In comparison, the number of upland acres treated by wetland restoration varies based on the hydrogeomorphic region, with a 2:1 ratio of upland acres treated in the coastal plain lowland region for headwater wetlands and 3:1 for floodplain wetlands. Note that this is the currently approved methodology for wetland creation and restoration by the CBP. However, recommendations from a new CBP expert panel on nontidal wetland rehabilitation, enhancement and creation are currently in the approval process and a new crediting approach for wetland creation may be applicable in the future.

Wetland restoration and creation was credited in this plan as a land use change from the conversion of agricultural land to the forest and barren category. For wetland creation, the upland reduction efficiencies were applied to the load from agricultural land assuming one upland acre per acre of wetland created. For restored wetlands the MDA database does not include whether wetlands are in the floodplain or headwaters. In order to be conservative, it was assumed that restored wetlands were headwater wetlands, which have a lower 2:1 ratio of upland acres treated compared to floodplain wetlands.

### ***Windbreak/Shelterbelt Establishment***

Windbreaks, also known as shelterbelts, are rows of trees or shrubs planted around the edges of agricultural fields to provide shelter from the wind and protect soil from erosion. They are equivalent to tree planting in the CBP crediting methodology, which is credited as a land use change. Windbreak/shelterbelt establishment is reported as

linear feet in the MDA database and was converted to acres assuming a 20-foot width per an email from Elizabeth Hoffman at MDA on 6/10/2019.

### ***Cover Crops***

Cover crops are cold-hardy cereal grains such as wheat, rye, and barley planted in newly harvested fields to recycle unused plant nutrients remaining in the soil and protect fields against wind and water erosion. Nutrient reductions for cover crops in the CBP crediting methodology vary based on hydrogeomorphic region, cover crop species, planting date and planting method. Per an email from Elizabeth Hoffman at MDA on 6/12/2019, the common type for traditional cover crops is standard wheat, no-till drill. The CBP efficiencies in the coastal plain for traditional wheat normal drilled in low tilled land use are 29% TN and 0% TP. The efficiencies in the coastal plain for standard commodity cover crops in low till areas is 10% TN and 0% TP.

Since cover crops are an annual practice, the baseline level of implementation needed to be subtracted from the current level in order to determine the increase in cover crop implementation that can be credited. Total acres of cover crops (traditional and commodity) were provided by MDA from 2006-2018. The baseline level of cover crop implementation was estimated as the average of the cover crop extent from 2006 and 2007. Prior to 2006, the cover crop data was only available at the state level and the 2006/2007 data are expected to be representative of level of implementation during the baseline. This assumption was suggested by Alisha Mulkey and Elizabeth Hoffman during a phone conversation on 7/15/2019. The acres of cover crops in 2018 were assumed to be the current level of implementation. The total acres of cover crops were split between traditional and commodity with an assumption provided by Elizabeth Hoffman that commodity crops make up approximately 30% of all the cover crops. A CAST run for Worcester County based on 2018 progress also confirmed that 30% of all cover crops are commodity. The CBP reduction efficiencies were applied to the load from agricultural land based on the creditable acres of traditional and commodity cover crops calculated according to this methodology.

### ***Soil Conservation and Water Quality Management Plans***

Soil conservation and water quality management plans (SCWQPs) are comprehensive plans that address natural resource management on agricultural lands and utilize BMPs that control erosion and sediment loss and manage runoff. The CBP crediting methodology provides a percent reduction for each acre reported under a SCWQP based on the agricultural load source type. Reduction efficiencies of 8 % for TN and 15% for TP are applied to the load from crop acres. Reduction efficiencies of 5% for TN and 10% for TP are applied to the load from pasture acres. Efficiencies of 30% for TN and 5% for TP are applied to high-quality natural lands associated with agricultural open space.

Similar to cover crops, SCWQPs are an annual practice and the creditable amount is calculated as the difference between the baseline and current levels of implementation. MDA provided the acres covered by SCWQPs in 2018 for the tidal basins split between crop, pasture, and high-quality acres. For the 2010-2018 fiscal years, only the acres covered by SCWQPs at the Worcester County level were

available. In order to determine the baseline level of SCWQP implementation, the acres covered by SCWQPs at the county level were extracted from CAST for the years 2001-2004. The average acres covered by SCWQPs at the county level from 2001-2004 were divided by the acres covered at the county level in 2018 and indicated that the baseline level was 67% of the current 2018 level. This percentage was applied to the 2018 acres covered by SCWQPs provided for the tidal basins to estimate the baseline level of implementation. The CBP reduction efficiencies were then applied to the load from agricultural land based on the creditable acres of SCWQPs calculated according to this methodology.

### ***Nutrient Management Plans***

Nutrient management is "the implementation of a site-specific combination of nutrient source, rate, timing, and placement into a strategy that seeks to optimize agronomic and environmentally efficient utilization of nitrogen and phosphorus" (CBP, 2018). The Maryland Water Quality Improvement Act of 1998 required all farmers to have and implement by July 1, 2005 nutrient management plans on their farms. From 1999-2005 MDA reviewed submitted nutrient management plans for compliance but since 2005, on-farm compliance inspections have been the method to verify and report acres of nutrient management annually for the Chesapeake Bay TMDL. Although these plans are required for farms that meet certain criteria, MDA reports that average compliance levels in recent years (2012-present) are around 65% statewide. Therefore, improvements in the level of compliance since the TMDL baseline should have an associated reduction in nutrient load to the Coastal Bays.

MDA's reporting on nutrient management plan compliance is county-based, not watershed-based. Therefore, the Center developed the following approach so that the MDA county-level data could be used to estimate a credit for this BMP.

### **Core NMPs**

The term "Core NMPs" refers to implementation and verification of plans that include a defined set of core nutrient management elements. Nutrient reduction credit can be given for the increase in acres with core NMPs since the TMDL baseline year (2005). Steps to calculate this credit include:

1. Estimate acres of cropland in the Coastal Bays watersheds with core NMPs during the TMDL monitoring period (2001-2004).

Since this data is not available specifically for the Coastal Bays watersheds, we assumed that the percent of cropland with NMPs in the Coastal Bays is proportional to what is reported for the Chesapeake watershed. Using CAST, we derived the acres of cropland with core NMPs in the Chesapeake portion of the County for each year (2001-2004) and used the total cropland acres from CAST to determine the percent with NMPs for each year. The average value for the baseline period (~40%) was then applied to the total acres of cropland in each of the Coastal Bays watersheds (from the TMDL) to generate the acres with core NMPs prior to the TMDL baseline.



2. Estimate acres of cropland with core NMPs at present (2018).

MDA reports that, on average, current (2012-present) compliance with the nutrient management regulation is 65% (per email from Alisha Mulkey on 7/23/19). The exact number of regulated acres in Worcester County is not available and it also varies from year to year. We conservatively estimated that 90% of cropland in Worcester County is subject to the nutrient management regulations. Therefore, current acres with core NMPs was calculated as the current acres of cropland in each Coastal Bay watershed \* 90% \* 65%. The total current (2018) acres of cropland in the Coastal Bays watershed (26,507 acres) was provided by MDA, and this total was assigned to each TMDL subwatershed based on the distribution of agricultural land use across these subwatersheds as determined using data from the Chesapeake Bay Phase 6 Land Use Viewer (<https://chesapeake.usgs.gov/phase6/map/>, data from 2013).

3. Estimate the increase in acres with core NMPs since the TMDL baseline.

We subtracted the pre-2005 acres with core NMPs from the current acres with core NMPs in each Coastal Bays watershed. This is the acreage for which a nutrient reduction credit was calculated.

4. Calculate the nutrient reduction credit.

We applied the TN lbs Reduced per Unit and TP lbs Reduced per Unit values for Core NMPs from the Worcester WIP III BMP Practice Load Reduction tables (provided by MDA, dated 8/7/2018) to calculate the TN and TP reductions associated with the above acreage in each Coastal Bays watershed. These values were provided to MDA by the Chesapeake Bay Program based on CAST runs and are specific to Worcester County.

5. Estimate the planned increase in acres with core NMPs (Assawoman Bay only).

Worcester County's WIP III goal for core NMP implementation is 70% of the acres subject to the nutrient management regulations (Worcester WIP III, provided by MDA, 8/7/2018). The exact number of regulated acres in Worcester County is not available and it also varies from year to year. We conservatively estimated that 90% of cropland in Worcester County is subject to the nutrient management regulations. The future acres with core NMPs was therefore calculated as the 2025 cropland acres in the Coastal Bays watershed (from the WIP III document) \* 90% \* 70%. The current level of core NMP implementation was subtracted from planned acres to determine the creditable acres. The nutrient reduction credit associated with this increase was calculated using the method described in #4 above.

### Supplemental NMPs

The term "Supplemental NMPs" refers to application of an additional set of strategies affecting the rate, timing or placement of nutrients. Credit for supplemental NMPs can

only be given on farms that have implemented core NMPs, and credits are stackable on top of the core NMP credit. Prior to 2005, there was little to no implementation of supplemental NMPs so nutrient reduction credit can be given for all current acres with supplemental NMPs. Steps to calculate this credit include:

1. Estimate the current (2018) acres of cropland with supplemental NMPs. Supplemental NMPs were only reported in CAST after 2016. Since these BMPs are only eligible on acres with core NMPs, we calculated the proportion of acres with core NMPs that reported having supplemental BMPs in 2017 and 2018 in the Chesapeake portion of Worcester County. The average proportion from these two years (N placement = 28%, N rate = 38%, N timing = 11%, P placement = 12%, P rate = 9%, P timing = 0%) was then applied to the current acres of cropland with core NMPs in the Coastal Bays watershed estimated in #2 above.
2. Apply the TN lbs Reduced per Unit and TP lbs Reduced per Unit values for the Supplemental NMPs from the Worcester WIP III BMP Practice Load Reduction tables (provided by MDA, dated 8/7/2018) to calculate the TN and TP reductions associated with the above acreage in each Coastal Bays watershed. These values were provided to MDA by the Chesapeake Bay Program based on CAST runs and are specific to Worcester County.
3. Estimate the planned increase in acres with Supplemental NMPs using the same method as for Core NMPs, and calculate the credit using the above methodology in #2. In Assawoman Bay, planned acre goals were lower than what was estimated for present, so there is no projected increase for these BMPs in this watershed.

## Urban BMPs

Urban BMPs include Berlin wetlands provided by Chesapeake and Atlantic Coastal Bays Trust Fund projects, Public Landing retrofits, Berlin rain gardens, Ocean Parkway SWM pond retrofits, and Ocean City stormwater BMPs installed as retrofits or to meet redevelopment requirements. Ocean City also provided catch basin and stormdrain cleanout information. Each urban stormwater BMP was defined as either a Runoff Reduction (RR) or a Stormwater Treatment (ST) practice, based on CBP distinctions (MDE, 2014; Schueler and Lane, 2015). Following the RR and ST convention, BMP reduction estimates were based on the CBP retrofit curves (Schueler and Lane, 2015) which are built into the Center for Watershed Protection's Retrofit Calculator spreadsheet. Additional information for the Ocean City redevelopment BMPs, catch basin and storm drain cleanouts, and street sweeping are provided below.

### ***Ocean City Redevelopment BMPs***

The current standard for redevelopment in Maryland is either to remove impervious cover or to capture and treat the runoff from 1 inch of rainfall from at least fifty percent of the existing impervious area within the project LOD. From 2001 to 2010, the standard was 20%. As a result, redevelopment sites achieve a reduction in pollutant load compared to the load prior to re-development. These load reductions can be counted towards the TMDL reductions, even for BMPs that are designed to treat less

than the 1" standard. In the Town of Ocean City, the majority of development is redevelopment (defined as pre-development impervious cover  $\geq 40\%$ ).

The Town of Ocean City provided a BMP database that included the date of all projects and whether the BMPs were installed for redevelopment, new development or as retrofits. The one unknown about these BMPs is whether any the treatment provided is for newly created impervious cover on the redevelopment site, and if so how much. Treatment provided for new impervious cover would not count towards the TMDL requirements. Conservative assumptions were made in the absence of this information. The methods used to estimate the nutrient load reduction associated with BMP installed on redevelopment sites in Ocean City since 2005 are described below.

Modifications to the Ocean City database:

- Delete all projects older than 2005. Rain barrels with dates listed as 2001-20017 were assumed to be installed in 2005 or later based on conversation with Ocean City staff.
- Delete new development projects
- Delete all BMPs with BMP storage of 0 (these are primarily pervious paving projects that do not provide WQ storage b/c they do not include a proper manifold) or site IC% of 0 (these were assumed to have been constructed to treat newly created IC).
- Add in column with Watershed
- Use address info to geolocate sites and fill in Watershed column with IOW or Assawoman
- Convert BMP drainage area (SA\_Served column) from square feet to acres
- IC% provided appears to be for site rather than BMP drainage area. In the absence of information on IC in the BMP drainage area, the assumption was made that site IC is likely to be representative of DA IC%. Exceptions include rain barrels and rooftop disconnection which are assumed to have 100% IC in the drainage area, as well as alternative surfaces which typically have between 50% and 100% IC in the drainage area. In the case of alternative surfaces, for BMPs where the site IC% was less than 50%, we used an assumed value of 83% for the IC% in the drainage area (based on the average IC% for all sites within 50-100% IC).
- Add new column to calculate impervious acres in drainage area using the above assumptions.
- Upon review of the treatment volumes provided for rooftop disconnection, a discount factor of 50% was applied to account for the fact that many of these sites do not have sufficient pervious area flowpaths to adequately reduce the volume from the 1" storm.

Assumptions based on info provided by Ocean City:

- Alternative surfaces include pervious pavers, pervious asphalt and pervious concrete
- Alternative surfaces, infiltration, WQ ponds, rain gardens and rooftop disconnection are BMPs installed for redevelopment. We discounted the nutrient

reductions by 50% because there is not sufficient information about each site to determine what portion of the treatment is provided to treat existing impervious vs newly created impervious.

- Mitigation projects use mitigation fees (e.g., fee-in-lieu for sites that cannot meet all requirements on site) to fund BMPs on private property. Like the other redevelopment BMPs, some portion of the nutrient reductions could be counted toward the TMDL, but the database does not include drainage area, storage volume or IC for these BMPs so they were unable to be credited.
- Rain barrels are installed as retrofits so the entire load reduction can be counted towards the TMDL.
- The treatment volume for each BMP in the database was used along with the CBP stormwater retrofit protocol to calculate nutrient reductions. Ocean City estimated treatment volume for rain gardens and rooftop disconnection based on lot size: lots < 5000sf were given a 500sf drainage area and lots > 5000 sf were given a 2000 sf drainage area. Rain barrels were assumed to be 55 gallons and treat 100 sf of rooftop

#### Modifications to the CWP Retrofit Calculator:

- On the Pollutant Loading tab, replace existing watershed names and loading rates with IOW and Assawoman and add TN and TP loading rates for urban land for these two watersheds from the TMDL
- Adjust calculations so that Drainage Area is an input and Turf Area is calculated as DA – IC
- Copy over the Address, Name, Watershed, IC in Drainage Area, Drainage Area Acres and Proposed Volume into the appropriate columns and complete the Proposed Practice column.
- Any BMPs with reductions of 0 (due to no IC in drainage area) were deleted (there were only a handful)

#### Assumptions:

- The Retrofit Calculator spreadsheet incorporates the CBP crediting methodology for stormwater retrofits
- Alternative surfaces, infiltration, rain gardens, rain barrels and rooftop disconnection are Runoff Reduction practice while WQ Ponds are Stormwater Treatment practices (based on the CBP expert panel report)

### ***Ocean City Catch Basin and Storm Drain Cleanout***

The catch basin and storm drain cleanout program was first conducted in Ocean City from January to March 2019. Approximately 131 cubic yards, equivalent to an estimated wet weight of 196.5 tons, of material was removed per an email from Elwood Vickers on 7/3/2019. Catch basin and stormdrain cleanout crediting followed the CBP Expert Panel Report on Street and Storm Drain Cleaning (Schueler et al., 2016). The wet weight was multiplied by 0.7 to convert it to a dry weight. Nutrient load reductions were then determined by multiplying the dry weight of sediment removed (in pounds) by a factor of 0.0006 and 0.0027, for TP and TN, respectively. The result is the lbs/year of TP and TN removed. Because this is an annual practice, the amount of

material removed during the baseline year would normally be subtracted from the current amount of material removed annually. However, Ocean City Dept of Public Works indicated that this was the first catch basin and storm drain cleanout ever conducted within the City. The entire amount of material removed during the 2019 program is therefore eligible for credit and the City indicated that the same amount of material is anticipated to be collected on an annual basis in subsequent years.

Ocean City encompasses both the Assawoman Bay and Isle of Wight TMDL subwatersheds. To partition the load reduction between these two subwatersheds, the ratio of the length of pipes, and number of catch basins and manholes cleaned in the subwatersheds was calculated. Approximately 90% of the pipes, catch basins and manholes cleaned were located Assawoman Bay and the remaining 10% were in Isle of Wight. These percentages were used to partition the load reduction between the two subwatersheds.

### ***Street Sweeping***

The CBP's 2015 Expert Panel report on street and storm drain cleaning (Schueler et al, 2016) outlines pollutant removal efficiencies associated with street sweeping programs using both advanced sweeping technology and mechanical broom technology as well as a range of street cleaning frequencies. Both Ocean City and Berlin use sweepers with mechanical broom technology, which according to the 2015 expert panel report are only eligible for sediment reduction credit with zero reduction given for nutrients.

Two other crediting methods exist for street sweeping, documented in the 2011 CBP street sweeping expert panel report, both of which MDE indicated could be acceptable to use (conversation with Jeff White, 7/2019). The qualifying lane miles method calculates load reduction based on the acres swept (miles swept \* 10 ft for one lane or 20 feet if both sides swept). The mass loading method requires measurement of the mass picked up by the sweeper (on an annual basis) and is adjusted for particle size. Both methods only apply to streets that are swept at least twice a week (26 times/year).

In order for any of the above methods to be applied to give credit for street sweeping in Berlin and Ocean City towards the Coastal Bays TMDL, the lane miles swept, sweeping frequency and/or technology used must have increased or improved since 2005. The information provided by Ocean City and Berlin about their street sweeping programs shown in the following table indicated that neither Town's program qualifies for nutrient reduction credit under the 2015 Bay Program protocol based on the technology used. Berlin's program does not meet the minimum sweeping frequency to apply the qualifying lane miles or mass load reduction methods. Ocean City does qualify for both methods, but they do not collect the necessary pre- and post-baseline amount collected/year to apply the mass loading method. The qualifying lane miles credit could be applied in Ocean City if the can demonstrate an increase in the number of lane miles swept since 2004; however, the credit would be relatively small. The mass loading approach provides the most credit, so future consideration for both programs include measuring the mass collected from the sweeper and upgrading to a more advanced sweeping technology to demonstrate an increase in the volume of

material removed from the streets. Given all this, the plan does not currently include any nutrient reductions from street sweeping in the Town of Ocean City or Town of Berlin.

Town Street Sweeping		Formal Program in Place?	Sweeping Technology	Lane Miles Swept/Yr	Sweeping Frequency	Mass Collected/Yr
Ocean City	Pre-2005	Y	Broom	?	?	?
	Current	Y	Broom	69	>26 times/year	?
Berlin	Pre-2005	N	N/A	N/A	N/A	N/A
	Current	Y	Broom	10	2 times/year	?

### Septic System BMPs

The official policy of the MDE Water Management Administration for crediting reductions from septic system pretreatment upgrades and conversions is as follows (White, 2016; White, 2019). A typical Worcester County residential septic system in the Coastal Plain Lowlands hydrogeomorphic region has a loading rate of 29.2 lbs/yr of nitrogen based on the Chesapeake Bay Program Phase 6 Watershed Model. This loading rate is lower than the 30.4 lbs per system used in the TMDL and therefore the septic baseline loads, and load allocations were adjusted as described further in Appendix B.

For pretreatment upgrades, the Chesapeake Bay Watershed Model estimates that a Best Available Technology (BAT) system removes 50% of the nitrogen from that of a conventional system. Therefore, the maximum load reduction that can be credited for an individual system is 14.6 lbs/yr. The location of the septic system either inside or outside of the critical area is then used, along with attenuation rates from the TMDL (MDE, 2013) to calculate the load reduction credited by pretreatment upgrades. For septic conversions where a conventional system is hooked up to a waste water treatment plant, only the portion of the septic loading equal to the loading from a BAT system is credited.

Mitchell (2016) and Mitchell (2019) document the number of septic systems conversions. Most of these systems treat commercial uses, such as Pines Plaza, Ocean Downs Raceway, and Castaways Campground that have flow rates larger than a typical residential unit. In order to calculate the nitrogen load reduction, an equivalent number of residential systems was estimated for each of the larger commercial systems. This was done using Bay Restoration Fund (BRF) regulations that define the equivalent dwelling unit of measure for the average daily flow of wastewater generated by a single residential dwelling to be 250 gallons per day (<http://www.mde.state.md.us/programs/Water/BayRestorationFund/FrequentlyAskedQuestions/Pages/Water/CBWRF/faqs/index.aspx>), as well as MDE guidance for wastewater capacity management plans (MDE, 2006).



In addition to septic systems that were conversions, many systems were upgraded with pretreatment using BAT. Worcester County provided data on the number of septic systems pretreatment upgrades completed to date based on BRF data, the County's septic system database, and general tracking of the system sizes (Mitchell, 2016; Mitchell, 2019). Individual residential systems were assigned one system upgrade. Commercial and other large system upgrades were calculated using an equivalent dwelling unit of 250 gpd as described above.

## **Other BMPs**

Other BMPs include tree planting, tidal and nontidal wetland restoration, shoreline restoration, and stream restoration project funded by the Chesapeake and Atlantic Coastal Bays Trust Fund. All tree planting and stream restoration projects were provided with load reductions, in addition to tidal marsh restoration and nontidal wetland enhancement projects implemented for the Assateague Island State Park Shoreline Resiliency Project. All provided load reductions followed the CBP crediting methodologies and were incorporated into the plan with no further calculations needed.

Several shoreline restoration, tidal wetland restoration, and nontidal wetland restoration projects were provided that did not have load reductions already calculated. Load reductions for these practices were calculated as described below

### ***Shoreline Restoration***

The length of shoreline remediation and living shoreline projects was provided in the Trust Fund data. Load reductions were calculated following the CBP Shoreline Expert Panel (Drescher and Stack, 2017) using the non-conforming/existing practices crediting protocol of 0.04756 lbs TN/linear foot restored and 0.03362 lbs TP/linear foot restored.

### ***Tidal Wetland Restoration***

The acres of tidal wetland restoration projects were provided in the Trust Fund data. Load reductions were calculated following Protocols 2, 3, and 4 of the CBP Shoreline Expert Panel (Drescher and Stack, 2017) as follows:

- Protocol 2 (Denitrification) provides a credit of 85 lbs TN per acre of revegetation.
- Protocol 3 (Sedimentation) provides a credit of 5.289 lbs TP per acre of vegetation.
- Protocol 4 (Marsh Redfield Ratio) provides a credit of 6.83 lbs TN and 0.3 lbs TP per acre of vegetation.

### ***Nontidal Wetland Restoration***

Load reductions from one nontidal wetland restoration project (Lizard Hill Bog) were calculated following the CBP Wetlands and Wetland Restoration Expert Panel (CBP, 2016). This included a land use change of the wetland area from urban to forest and barren. The previous land use was a sand mine. However, the urban land use category was selected from the TMDL as the best approximate estimation. In addition, load reduction from upland acres was calculated as three upland acres to every acre of wetland restored and a reduction efficiency of 42% for TN and 40% for TP. The upland

acres are a mix of agriculture and suburban residential and therefore the reduction efficiencies were applied to the load generated using an average of the urban and agricultural land use loading rates.

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Coastal Bays Health Index 2017									
Coastal Bays Health Index 2017									
Overall grade									
area (km2)									
Health Index									
area weighted index									
2017	DO	TN	TP	Chl-a	Hard Clam**	2017 SAV	Health Index		
Assawoman	60.0	73.3	53.3	100.0	45.3	0.00	55.3	20.9	2.98
Chincoteague	60.0	97.8	77.8	100.0	19.6	36.75	65.3	298	50.12
Isle of Wight	49.1	69.1	47.3	96.4	76.5	0.00	56.4	21.1	3.06
Newport	65.0	31.3	40.0	77.5	32.0	11.39	42.8	15.9	1.75
Sinepuxent	54.3	100.0	54.3	100.0	68.6	48.21	70.9	24.1	4.40
St. Martin River	40.0	31.1	37.8	73.3	n/a	0.00	36.4	8.4	0.79
								388.40	63.10
36.44444									
Summary									
2017 Health									
region	Index						Grade		
Assawoman	55.3						C		
Chincoteague	65.3						B-		
Isle of Wight	56.4						C+		
Newport	42.8						C-		
Sinepuxent	70.9						B		
St. Martin River	36.4						D+		
Entire system	63.1						B-		

\*\*hard clam data is three year average

\*new hard clam boat captain in 2017- technical issues sampling in certain se

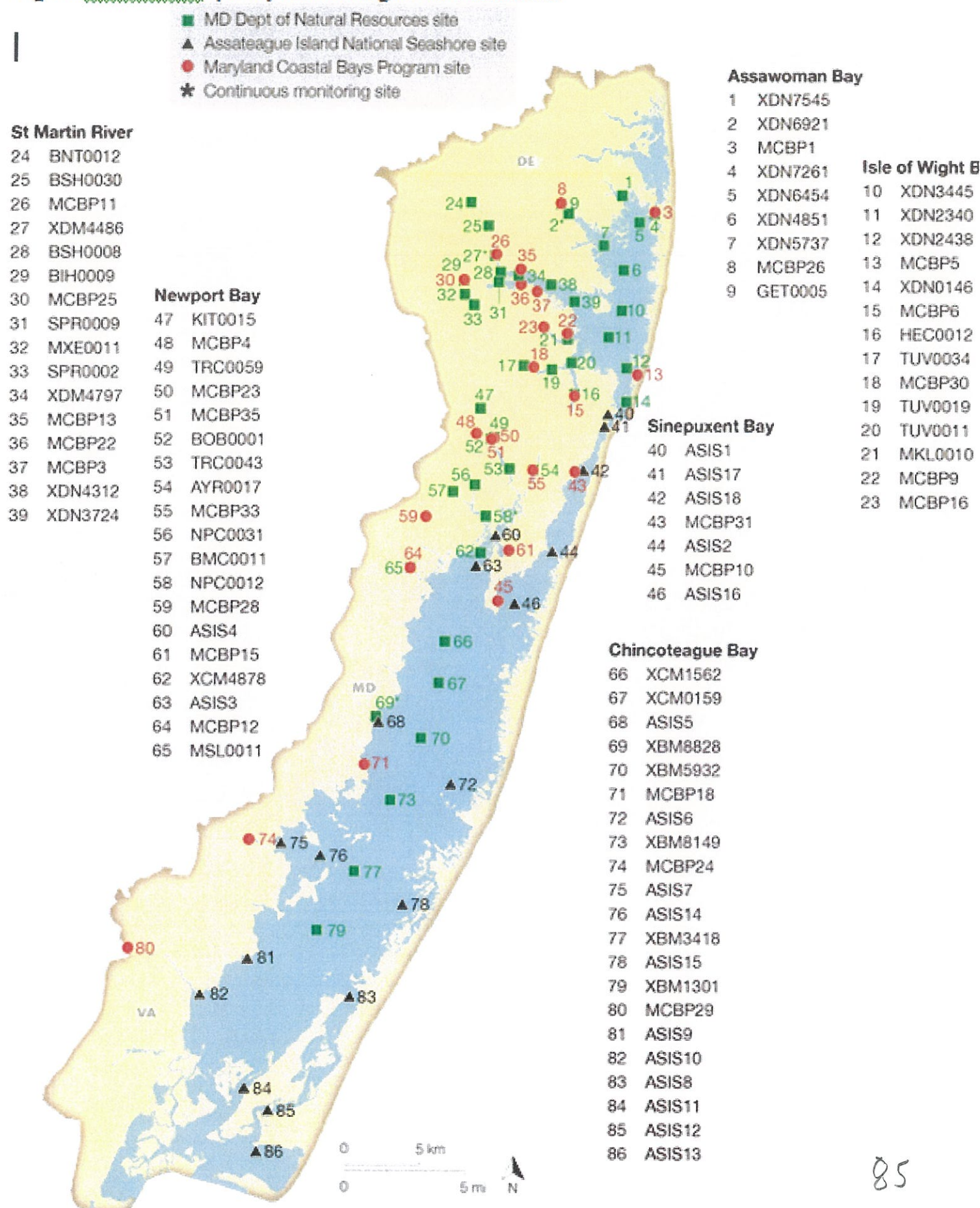
0-20=F
21-40=D
41-60=C
61-80=B
81-100=A

2016	DO	TN	TP	Chl-a	Hard Clam	SAV	Health Index	Area Weighted Index	
Assawoman	46.7	66.7	63.3	100.0	62.0	0.00	56.4	3.037304039	
Chincoteague	53.3	92.2	45.6	96.7	22.4	36.45	57.8	44.32404963	
Isle of Wight	54.0	69.1	47.3	89.1	77.3	0.00	56.1	3.049155258	
Newport	47.5	33.8	51.3	85.0	31.4	7.76	42.8	1.750936702	
Sinepuxent	57.1	100.0	60.0	100.0	69.2	42.22	71.4	4.43234302	
St. Martin River	52.0	34.0	36.0	72.0	n/a	0.00	38.8	0.839134912	
								57.43292356	

region	2016 Health Index	Grade
Assawoman	56.4	C+
Chincoteague	57.8	C+
Isle of Wight	56.1	C+
Newport	42.8	C-
Sinepuxent	71.4	B
St. Martin River	38.8	D+
Entire system	57.4	C+

region	2015 Health Index	Grade
Assawoman	49.7	C
Chincoteague	59.7	C+
Isle of Wight	52.6	C
Newport	43.5	C-
Sinepuxent	65.5	B
St. Martin River	37.2	D+
Entire system	57.9	C+



**Figure 4.2.1** Water quality monitoring station locations.



c Program	System	Station	DEPTH	NAD27_Lat	chd_N	NO2	NH4	TDN	PN	P (PO4, TDP, PP, PIP)	TSS	DATAFLOW	Conti Plankt #phyto	Brown Tide si	notes
Coastal Bays/CN	STUART	XDM4486	S	12	Y					Y	Y		Y	12	common XDM4486 - 2002 - Present
CoastalBays	ASSAWOMAN	GET0005		38 27.231	12	Y	Y	Y	Y	Y	Y		Y		common XDM6921 - 2008 - present
CoastalBays	ASSAWOMAN	XDN4851		38 24.8	12	Y	Y	Y	Y	Y	Y				
CoastalBays	ASSAWOMAN	XDN5737	S	38 25.7	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	ASSAWOMAN	XDN6454	S	38 26.5	12	Y	Y	Y	Y	Y	Y		Y	9	
CoastalBays	ASSAWOMAN	XDN7261	S	38 27.166	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	ASSAWOMAN	XDN7545	S	38 27.488	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	CHINCOTEAGUE	XBM1301	S	38 01.314	12	Y	Y	Y	Y	Y	Y		Y	9	Ferry Landing, Green Point, Public Landing Simmickson (V.A), Taylors landing
CoastalBays	CHINCOTEAGUE	XBM3418		38 03.344	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	CHINCOTEAGUE	XBM5932	S	38 05.899	12	Y	Y	Y	Y	Y	Y		Y	9	Y - ASIS site
CoastalBays	CHINCOTEAGUE	XBM8149		38 08.087	12	Y	Y	Y	Y	Y	Y		Y	9	Y - ASIS site
CoastalBays	CHINCOTEAGUE	XCM0159		38 10.090	12	Y	Y	Y	Y	Y	Y		Y	9	Y - ASIS site
CoastalBays	Isle of Wight	MKL0010	S	38 22.353	12	Y	Y	Y	Y	Y	Y		Y	12	common XBM8828 (Public Landing) - 1990-present
CoastalBays	Isle of Wight	TUV0011	S	38 21.51	12	Y	Y	Y	Y	Y	Y		Y	9	common TUV0021 xxx - 2007
CoastalBays	Isle of Wight	XDN0146		38 20.054	12	Y	Y	Y	Y	Y	Y		Y	9	
CoastalBays	Isle of Wight	XDN2340		38 22.4	12	Y	Y	Y	Y	Y	Y		Y	9	
CoastalBays	Isle of Wight	XDN2438		38 21.273	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	Isle of Wight	XDN3445	S	38 23.348	12	Y	Y	Y	Y	Y	Y		Y	9	
CoastalBays	STUART	BIH0009		38 24.556	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	STUART	BNT0012		38 27.335	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	STUART	BSH0008		38 24.831	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	STUART	BSH0030		38 26.557	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	STUART	HEC0012		38 20.347	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	STUART	MXE0011		38 23.987	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	STUART	SBR0022		38 23.706	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	STUART	SPR0002		38 24.418	12	Y	Y	Y	Y	Y	Y		Y	12	
CoastalBays	STUART	SPR0009		38 24.418	12	Y	Y	Y	Y	Y	Y		Y	12	
CoastalBays	STUART	TUV0019		38 21.405	12	Y	Y	Y	Y	Y	Y		Y	9	
CoastalBays	STUART	TUV0034		38 21.510	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	STUART	XDN3527		38 23.404	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	STUART	XDN3724		38 23.696	12	Y	Y	Y	Y	Y	Y		Y	9	
CoastalBays	STUART	XDN4312	S	38 24.327	12	Y	Y	Y	Y	Y	Y		Y	12	
CoastalBays	STUART	XDN4797	S	38 24.682	12	Y	Y	Y	Y	Y	Y		Y	12	
CoastalBays	TRAPPE	AYR0017	S	38 17.671	12	Y	Y	Y	Y	Y	Y		Y	9	
CoastalBays	TRAPPE	AYR0033		38 18.748	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	TRAPPE	BMC0011		38 16.946	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	TRAPPE	BOB0001		38 18.805	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	TRAPPE	KIT0015		38 19.888	12	Y	Y	Y	Y	Y	Y		Y	9	
CoastalBays	TRAPPE	MSL0011	S	38 14.24	12	Y	Y	Y	Y	Y	Y		Y	9	common NPC0012 2007-present
CoastalBays	TRAPPE	NPC0012	S	38 16.114	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	TRAPPE	NPC0031		38 17.164	12	Y	Y	Y	Y	Y	Y		Y		
CoastalBays	TRAPPE	TRC0043	S	38 17.787	12	Y	Y	Y	Y	Y	Y		Y	9	Y - ASIS site
CoastalBays	TRAPPE	TRC0059		38 18.837	12	Y	Y	Y	Y	Y	Y		Y		Trappe
CoastalBays	TRAPPE	XCM1562		38 11.330	12	Y	Y	Y	Y	Y	Y		Y		Y - ASIS site
CoastalBays	TRAPPE	XCM3367		38 13.826	12	Y	Y	Y	Y	Y	Y		Y		Newport Bay
CoastalBays	TRAPPE	XCM4878		38 14.475	12	Y	Y	Y	Y	Y	Y		Y		
DF03	CoastalBays	CBDF01		38 20.04512983333333							Y				dataflow done 20xx
DF03	CoastalBays	CBDF02		38 23.3391735							Y				dataflow done 20xx
DF03	CoastalBays	CBDF03		38 26.49522333333333							Y				dataflow done 20xx
DF03	CoastalBays	CBDF04		38 24.32316183333333							Y				dataflow done 20xx
DF03	CoastalBays	CBDF05		38 25.43315566666667							Y				dataflow done 20xx
DF03	CoastalBays	CBDF06		38 21.31712266666667							Y				dataflow done 20xx
DF03	CoastalBays	CBDF07		38 11.29093883333333							Y				dataflow done 20xx
DF03	CoastalBays	CBDF08		38 14.47101416666667							Y				dataflow done 20xx
DF03	CoastalBays	CBDF09		38 26.4832025							Y				dataflow done 20xx
DF03	CoastalBays	CBDF10		38 16.24106433333333							Y				dataflow done 20xx
DF03	CoastalBays	CBDF11		38 13.33098333333333							Y				dataflow done 20xx

# QUALITY ASSURANCE MANAGEMENT PLAN

for the



## **Maryland Coastal Bays Program**

8219 Stephen Decatur Highway, Berlin, Maryland – 21811

April 26, 2004

December 2010

Revised: July 2016

**Maryland Coastal Bays Program**  
**QUALITY ASSURANCE MANAGEMENT PLAN**  
**CONCURRENCES**



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Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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# 1 MANAGEMENT AND ORGANIZATION

## 1.1 QUALITY ASSURANCE POLICY STATEMENT

### 1.1.1 Introduction

Established in 1987 under the Clean Water Act, the National Estuary Program was developed to protect economically and environmentally sensitive estuaries across the United States by engaging all user groups. Established in 1997, The Maryland Coastal Bays Program (MCBP) is one of only 28 such programs nationwide.

The MCBP protects the 175 square mile watershed including the land and waters of Assawoman, Isle of Wight, Sinepuxent, Newport, and Chincoteague bays.

Maryland's coastal bays make up one of the richest, most diverse estuaries on the eastern seaboard. For more than a century, agriculture, forestry, fishing, hunting, and more recently tourism, has sustained ways of life built on the land and water resources in this coastal community.

A way of life in this community for over 400 years, farming and forestry continue to define the character and culture of this rustic jewel. Today, Worcester's forests and 374 farms contribute hundreds of millions of dollars annually to the local economy. Both also provide the open space and natural land essential to the wildlife which calls this part of the Eastern Shore home.

At the same time, the coastal bays' multi-million-dollar tourism industry is fueled by 11 million annual visitors who flock to the coastal bays to fish, boat, swim, or just enjoy the atmosphere in their favorite bayside restaurant.

Yet these very attractions are paving the way for additional stress on the land and water resources that make up this coastal paradise. Population trends suggest that Worcester County will increase by more than 4,500 by the year 2020. Balancing growth with natural resource protection will be the ultimate challenge this estuary faces in the next millennium.

To achieve this balance, Worcester County residents from all walks of life have been working together to devise common sense ways of protecting the bays behind Ocean City and Assateague. This effort, the MCBP, has culminated in a Comprehensive Conservation and Management Plan (CCMP) aimed at preserving this precious coastal resource.

Created by representatives from the development, farming, golf, tourism, and fishing industries, the plan represents a consensus of the best means needed to preserve the economic and ecological prosperity of the coastal bays in the next century. With help from local, state, and federal planners

and scientists, the strategies in this plan include reachable scientific goals and the most effective means for implementing them.

The community and dedicated volunteers have made remarkable achievements since the original 1996 CCMP. In fact, 80% of the original actions have been accomplished. The plan was updated and renewed in 2014 and represents a priority “to-do list” needed to leave a legacy of thriving coastal waters.

This plan pinpoints conservation goals and the strategies needed to accomplish those goals. The plan also depicts how much each strategy will cost, who will be responsible for implementing it, and a timetable for implementation of each strategy. An Implementation and Finance Plan shows how each strategy will be funded.

Community support has renewed the original plan and will drive it in the future. Ultimately it is the residents of this watershed who are the arbiters of its prosperity.

#### 1.1.2 Quality System Goals and Objectives

The MCBP has developed and integrated quality assurance practices into all phases of the environmental data collection activities under its funding purview. These quality assurance practices are focused on ensuring that all data generated through MCBP funding are scientifically valid, defensible, of high quality, and designed to meet data user requirements.

This Quality Management Plan (QMP) seeks to define and describe the quality assurance and quality control policies and responsibilities prescribed by the MCBP in accordance with statements of quality assurance and peer review policies by the EPA Administrators and EPA CIO Order 2105.0. This document intends to link the management policies, objectives and principals of the MCBP with the procedures described in the associated Quality Assurance Project Plans (QAPP) and Standard Operating Procedures (SOP) which are designed to produce data of high quality. These policies guide program staff in the uniform implementation of requirements for all grants, contracts, cooperative and interagency agreements involving environmental data collection.

#### 1.1.3 Policy

It is the policy of the MCBP that the Quality Assurance Program (QAP) will be appropriate to assure that all environmental data generated, and where possible, processed or used by the MCBP, will be scientifically valid; of acceptable completeness, representativeness, and comparability; and of a high and documented quality. It is also the policy of the MCBP that all reported data will include, where possible, documentation of precision and accuracy. The quality of the data generated under the auspices of the



Program shall meet or exceed all State, Regional, and National Program Office requirements. This policy shall be implemented by ensuring that for all environmental data acquisition efforts funded by the MCBP, adequate quality assurance procedures will be employed throughout the entire environmental data collection process from study design through data access.

## 1.2 ORGANIZATIONAL CHART

The MCBP is organized as a discrete not-for-profit organization under applicable Federal and State statutes 501(c)(3). The organization is directed by an Executive Director and functions under the policy guidance of a Board of Directors with Committee assistance. The organizational structure is described in Figure 1.

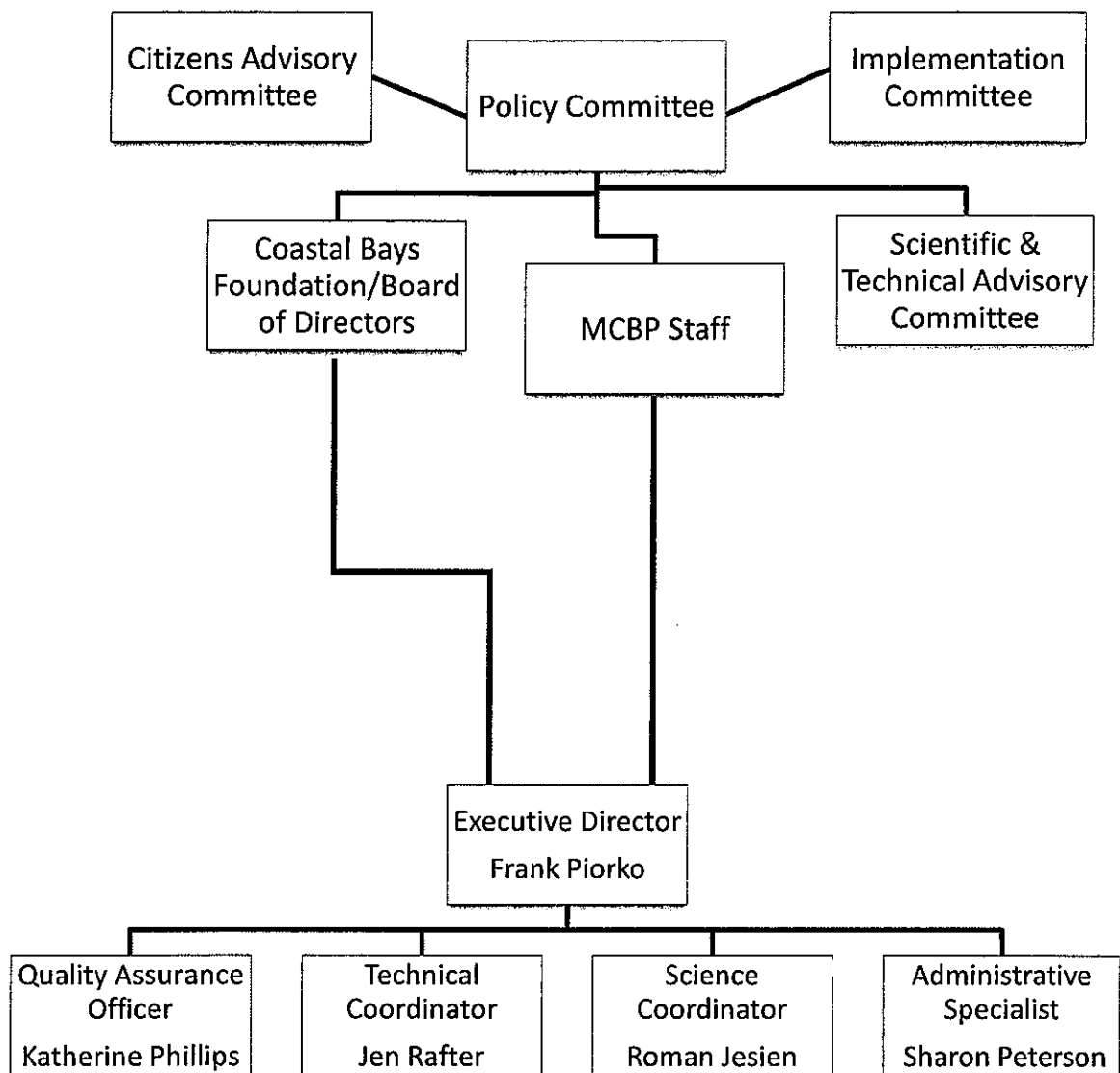


Figure 1. Organizational Chart of the Maryland Coastal Bays Program's Quality System

### 1.3 RESPONSIBILITIES

#### 1.3.1 Organization, Delegations and Responsibilities

The Executive Director of the MCBP has overall program management responsibilities for all activities including generation of data of documented quality and management responsibilities for the development, implementation, and continued operation of the MCBP QAP. Specific quality assurance management and implementation responsibilities are assigned to the Quality Assurance Officer (QAO) and other staff members.

The authority and responsibility for managing the quality assurance activities within the MCBP have been delegated to the QAO. Due to limited staff and multiple responsibilities, the QAO may occasionally be involved in data generation and analysis. In such instances, a staff member not associated with the project, who is trained in QA practices, will serve as the temporary QAO for that project. When staff is unavailable, scientific partners from academia and government will utilize their QA/QC. The QAO has the overall responsibility for the development, implementation and continued oversight of the MCBP QAP. The QAO reports directly to the Executive Director of the MCBP.

<b>Maryland Coastal Bays Quality Assurance Officer Task List</b>
Serves as the official Maryland Coastal Bays Program contact for all quality assurance and quality control matters of the Maryland Coastal Bays Program;
Coordinates Maryland Coastal Bays Program quality assurance matters with other quality assurance managers to insure that all methods and quality assurance policies are in accordance with current EPA National and Regional guidelines;
Prepares the Maryland Coastal Bays Program Quality Management Plan;
Annually reviews the Quality Management Plan and revises it if changes are necessary;
Updates the Quality Management Plan as physical, personnel, or policy changes occur;
Oversees all quality assurance and quality control activities within the Maryland Coastal Bays Program;
Identifies and delegates responsibility for responding to quality assurance and quality control needs, and ensures timely answers to requests for guidance or assistance;
Ensures all quality assurance program plans and quality assurance project plans are technically reviewed and approved prior to awarding grants, contract, cooperatives, or interagency agreements involving collection of environmental data;
Ensures that problems and deficiencies identified in technical audits and data analysis are resolved;
Includes statements in the Maryland Coastal Bays Program solicitations, grants, cooperative and interagency agreement guidance that specify quality assurance requirements;
Arranges for training regarding quality assurance requirements and procedures of the Maryland Coastal Bays Program for program staff and for recipients of Maryland Coastal Bays Program funding, when requested or deemed appropriate;
Undergoes Quality Assurance training as often as necessary and subscribes to EPA email QA updates;
Establishes criteria for the acceptability of quality documentation in Maryland Coastal Bays Program quality assurance reports.

The principle investigators and other staff members have the responsibility for ensuring that the recipients of federal funds implement the quality assurance activities required by EPA as stated in MCBP grants, cooperative and interagency agreements guidance and documented with the assistance agreement. The Principle Investigator (PI) ensures all statements

of work include specific guidance and criteria about the quality of environmental measurements expected. The PI must obtain agreement from the MCBP QAO on all matters affecting quality assurance; however, the PI is ultimately accountable for resolving problems and deficiencies identified in technical reviews, audits and data analysis.

### 1.3.2 Communications

There are many forms of communication for ensuring that quality assurance is integral to environmental data collection efforts. Managers of the Program review the QMP annually and concur by signing the document. This annual review is scheduled one month prior to the solicitation of grants to ensure that any necessary quality system updates can be implemented before the grant process begins. At least once per year, extramural grant recipients, principle investigators and other staff members receive grants management guidance which includes the most recent requirements of the quality assurance system, if needed and appropriate. These requirements are communicated to grantees and assistance agreement holders via the grant guidance, which is described in Section 4 below.

Once a submitted QAPP is approved, quality assurance and quality control documentation is required with the submission of data both in the form of quality control data and metadata for the data themselves.

The PI and grant recipient shall notify the MCBP QAO immediately of any problem areas identified. Disputes arising related to quality assurance as a result of assessment will be addressed in face-to-face meetings, staff meetings, e-mail, or annual audits. Mutually agreeable solutions will be developed by the PI with staff involved under the supervision of the MCBP QAO. Necessary changes will be jointly outlined and the PI will institute corrective actions. A follow-up review of the required changes will be made by the MCBP QAO and the staff member to verify that problems have been corrected. Should the discussion result in an alteration of the QMP, these alterations will be recorded in the QMP log and all MCBP staff members will be informed, and trained, if necessary, on the update.

## 1.4 RESOURCES FOR THE QUALITY ASSURANCE PROGRAM

Resources required for the successful implementation the MCBP QAP, such as systems, training and support, are provided within the program budget annually.

## 2 QUALITY SYSTEM AND DESCRIPTION

The goal of the QAP of the MCBP is to ensure that each funded project involving the collection of new environmental data includes sufficient planning for the development of well-defined project goals and data quality objectives. These

objectives need to be supported by implementation of sampling design, collection, and analysis protocols such that the resultant data completely and accurately address the project's goals.

## 2.1 DESCRIPTION

It is the policy of the MCBP that:

Each project or program funded by the MCBP that generates environmental data will develop and implement a QAPP addressing the required major elements and will ensure that adequate resources (both monetary and staff) are provided to support the quality assurance effort. The QAPP will specify the detailed procedures required to assure quality data. QAPPs must be jointly approved by the MCBP QAO and the PI prior to data collection. Special exemptions can only be requested and approved through the MCBP QAO.

All environmental data generated for the MCBP through direct funding will be of known and acceptable quality as defined in the Data Quality Objectives. The data quality information developed for all environmental data will be documented.

All funded environmental data collection efforts will include acceptable quality assurance requirements.

The intended use(s) of the data will be defined before the data collection effort begins, so that appropriate quality assurance measures may be applied to ensure a level of data quality commensurate with the monitoring objectives. The determination of this level of data quality shall also consider the prospective data needs of secondary users. Data Quality Objectives will be established to ensure the utility of the environmental data for its intended use and as guidance for preparation of QAPP. The intended data uses, level of quality, specific quality assurance activities, and data acceptance criteria needed to meet the data quality needs of these uses will be described in each environmental data collection activity's QAPP.

Quality assurance activities will be designed in the most cost effective fashion possible without compromising data quality objectives.

The MCBP expends resources on environmental data generation and, in some circumstances the program uses data from external sources. Under the auspices of the MCBP QAO, the Program will work with these data providers to inform them of the quality assurance requirements of the Program.

## 2.2 PRINCIPAL COMPONENTS OF THE QUALITY SYSTEM

There are several components to the MCBP QAP to carry out these policies. The program consists of the development and maintenance of Quality

Management Plans (QMPs), Data Quality Objectives, Quality Assurance Project Plans (QAPPs), and Standard Operating Procedures (SOPs). EPA Quality System documents can be found at <https://www.epa.gov/quality/managing-quality-environmental-data-epa-region-3>

#### 2.2.1 Data Quality Objectives

Data quality objectives are statements of the quality of environmental data required to support Program decisions or actions. Data quality objectives establish the level of risk or uncertainty that the Program is willing to accept in the environmental data it needs in order to make a defensible decision. Data Quality Objectives represent a major planning element which delineates a formally structured process whereby it is determined what environmental data are needed, what data quality is required, and the appropriate balance between time, resources and data quality.

#### 2.2.2 Quality Assurance Project Plans

All directly funded projects which involve the collection of new environmental data (activities that involve the measurement and collection of physical, chemical, or biological parameters) are required to document all aspects of their project's sampling design, sample collection, analysis, quality control, and data management activities in a quality assurance project plan. Within the MCBP, these projects cover a wide variety of activities, are limited in number and extent, and may include the collection of groundwater, surface water, sediment, atmospheric, living resource, and remotely sensed data.

A QAPP is a formal document describing the project goals and objectives, methods for collecting and assessing environmental data, quality assurance, quality control, and other technical activities that must be implemented to ensure that the results of the work performed will satisfy the stated performance criteria. A QAPP is submitted to the PI prior to the initiation of each data collection or data compilation activity. Each of the extramural organizations' QAPPs must be reviewed and approved by the MCBP QAO and the PI prior to the initiation of the project. The requirements for QAPPs are defined in *EPA Requirements for Quality Assurance Project Plans* (QA/R-5) (EPA 2001).

For ongoing environmental data collection programs, the QAPPs must be updated annually to accurately document any changes to collection, sample handling and storage, laboratory analysis, quality control, and data management activities. The funding recipient should notify the PI prior to changing the number of samples, the number of sites, or the number of parameters. If no changes are required to an existing QAPP, the funding recipient is required to provide written documentation (e.g., a letter) to the staff member that a review was conducted and no changes have occurred.



### 2.2.3 Quality Management Plans

In accordance with 40 CFR 30.54 and 31.45, organizations conducting environmental programs funded by EPA that acquire, generate, compile, or use environmental data and technology are required to establish and implement a quality system. Recipients of contracts, grants or cooperative agreements shall describe their quality assurance system in a written QMP. A QMP describes a quality system in terms of the organizational structure, functional responsibilities of management and staff, line of authority and required interfaces for those planning, implementing, and assessing all activities. QMPs must be prepared in accordance with *EPA QA/R-2: EPA Requirements for Quality Management Plans* (EPA 2001) and be submitted for review and approval to the MCBP QAO. Prior to the initiation of environmental data collection and/or compilation activities, each of the extramural organizations' QMPs must be reviewed and approved by the MCBP QAO.

### 2.2.4 Standard Operating Procedures

SOPs are documented methods for performing certain routine or repetitive tasks. These tasks include such operations as sampling, sample tracking, analysis, glassware preparation, instrument or method calibrations, preventative and corrective maintenance, internal quality control, data reduction and analysis. SOPs should be expressed in terms of fixed protocols which must be followed. Where options exist, these should be clearly described and criteria for selection of alternatives must be included. The SOPs should be written by personnel performing the task routinely so that the actual practices may be recorded. Published methods rarely have all the procedural details. Those references that are adequately detailed must be modified for the application or facilities at hand. SOPs shall be organized as a formal document prepared in accordance with *EPA QA/G-6: Guidance for Preparing Standard Operating Procedures* (EPA 2007) and will be submitted to the MCBP QAO for maintenance in a permanent file. If applicable, the SOP is also kept in the grant file under which the data manager is funded. SOPs are referenced in an approved QAPP for a specific environmental data collection effort.

The following are considerations involved in the development and utilization of SOPs:

- Adequate to establish traceability of standards, instrumentation, samples and environmental data;
- Simple, so that any user with appropriate general education, experience and training can duplicate the task as historically performed;
- Complete enough so the user or auditor follows the directions in a logical stepwise manner through the sampling, analysis, and data handling processes;
- Consistent with sound scientific and engineering principles;

- Consistent with current EPA regulations and guidelines;
- Consistent with the instrument manufacturers' instruction manuals; and
- Consistent with the recommendations of methods consensus workshops and conferences.

<u>Items to be Addressed in Standard Operating Procedures</u>	
General network design.	Duplicate, spiked, blank samples and analysis
Specific sampling site selection.	Split sample protocols.
Sampling and analytical methodology.	Documentation, sample custody, transportation, and handling procedures.
Probes, collection devices, storage containers, and sample additives such as preservatives.	Data handling assessment procedures.
Special precautions such as holding times, protection from heat.	Specific quantitative determinations of precision, accuracy, completeness, representativeness and comparability.
Instrumentation selection and use.	Service contracts.
Calibration and standardization.	Document Control.
Preventative and remedial maintenance.	Training Guidelines.

#### **Benefits of Standard Operating Procedures**

- Provide a record of the performance of all tasks at any fixed point in time.
- Increase the opportunity for thorough review of procedures with appropriate sign-off by management.
- Serve as a training document for new employees providing consistent performance of tasks.

The most frequently used SOP in the MCBP office is the;

*Standard Operating Procedures for the Volunteer Water Monitoring Program*, Maryland Coastal Bays Program, December 17, 2010.

QA Sessions are held annually at the MCBP office to ensure that new volunteer participants are up to date on training and are following the SOPs. Attendance is mandatory for program participants. If they are unable to attend on the QA sessions in the office, a private session will be held in the field. If the session reveals a participant deficient in training or SOP information, the QAO and the PI will take corrective actions to re-train the individual. Participants receive method reminders if their data is

questionable or samples are flagged by the lab. Letters reiterating the purpose and goals of quality assurance are mailed annually to each participant, regardless of their length of service.

#### 2.2.5 Proposed Project Quality System Documentation Checklist

In order to efficiently identify projects that require quality assurance documentation, the MCBP QAO has developed the Proposed Project Quality System Documentation Checklist (Appendix A). The Checklist allows the MCBP to quickly and accurately discern whether or not a proposed project requires quality system documentation such as a QMP or QAPP. If a project does not require quality systems, the checklist serves as written documentation of the fact. Assessed by two levels of authority to avert error, the Checklist requires the signature of both the PI and the MCBP QAO. The Proposed Project Quality System Documentation Checklist is stored with the associated project's documents as a hard copy and electronically in the MCBP office by the QAO.

#### 2.2.6 Information Management System

MCBP does operate an information management system for environmental data. Protocols for maintenance of this data are currently in development.

### 2.3 PROGRAMS SUPPORTED BY THE QUALITY SYSTEM

Most of the resources of the MCBP designated for extramural uses involve educational or outreach activities and, therefore, are excluded from the requirements of the MCBP QAP. The limited number of projects collecting environmental data and supported by the MCBP are State agencies that already are in compliance and familiar with the EPA Quality Assurance requirements. Protocols for MCBP initiated projects are currently in development.

## 3 PERSONNEL QUALIFICATION AND TRAINING

The scientific and technical staff and many of the participants in data collection activities supported by the MCBP have received training in the context of tasks and functions related to data. In addition, they are required to draw upon their educational background, experience, professional symposia, and on-the-job training. Staff members participate in technical workshops to share and expand their knowledge in their areas of expertise. Staff proficiency is demonstrated through workshop conference presentations, written reports, membership in advisory committees, various committee presentations and publications. Also, annual reviews of staff performance are conducted by the Executive Director. If a staff member is found deficient in Quality Assurance training, due to changing requirements for example, the Executive Director will contact the QAO so that updated staff training can be

implemented. If there is a conflict of interest, the Executive Director will coordinate staff training and implementation.

Maintaining updated training on Quality Assurance for both staff and management is a priority for the MCBP and is monitored closely. Log sheets are used to track staff training, audit results and, if necessary, corresponding actions, and responsibilities. This will ease the administrative tasks of the MCBP QAO. Based on this log, the QAO will annually develop and implement a list of QA/QC tasks that need to be addressed within the Program.

**Quality Management Training Requirements for MCBP Staff**  
**Position Quality Management Training Requirements**

Executive Director	Overview of MCBPs Quality System (every 3 years) Orientation to Quality Assurance for Managers (1 time only)
Principle Investigators	Overview of MCBP's Quality System (every 3 years) MCBP Quality System Training for Project Officers (every 3 years)
All MCBP staff involved in the generation or use of environmental information	Overview of MCBP's quality system (every 3 years)
MCBP Quality Assurance Officer	Overview of MCBP's quality system (every 3 years) Development of Quality Assurance Project Plans (1 time only) Data Quality Assessment (1 time only) Development of Quality Management Plans (suggested course)

#### **4 PROCUREMENT OF ITEMS AND SERVICES**

Most of the environmental collection services are obtained through the use of implementation and scientific grants. Guidance for grant applications is developed as a collaborative effort among the staff of the MCBP. The guidance specifies the quality assurance requirements of the MCBP. The guidance is reviewed, updated and distributed annually to potential recipients of Program funding. Requirements for quality assurance and data deliverables are communicated to grant recipients through the Requests for Proposals (RFP).

The MCBP may use data that are generated under the auspices of other federal and state funding mechanisms. For data beyond the direct control or influence of the decision makers and users within the MCBP, the Program actively works with these organizations to develop consistent guidance materials and QAPPs. The data may be utilized following peer review and evaluation through the MCBP Scientific and Advisory Committee (STAC). Hydrological, meteorological, and agricultural data from EPA, USGS, NOAA, and USDA are acceptable. Point-source and non-point-

source data that are generated by the state and county agencies may be compiled by MCBP staff and included into MCBP databases with proper quality documentation. These data are subject to closer review for accuracy and completeness prior to being utilized. Acceptance criteria for these secondary data sets are documented in the SOPs from the originating agencies.

#### 4.1 REVIEW AND APPROVAL OF RESPONSES TO SOLICITATION

The MCBP has an extensive system in place to review and approve proposals submitted in response to solicitations for grants. The process is initiated through advertisement of a Request for Proposals (RFP), qualifications through newsletters, the MCBP website and other means. Once proposals are received, they are initially screened by the MCBP staff for deadline requirements, necessary applicant designations (e.g. nonprofit status), and other requirements specified by the RFP. Once the proposals are initially screened, they are sent to a panel of technical reviewers who rate each proposal on a predetermined set of criteria which is addressed within the RFP. The ratings for each proposal are sent to the Executive Director for a final selection of the grant recipient.

#### 4.2 REVIEW AND APPROVAL OF QUALITY ASSURANCE PROJECT PLANS

Effective management of a data collection program requires periodic assessment of the quality of data being obtained to establish a basis to determine when and if corrective action may be needed. To ensure that this assessment occurs, all environmental data collection efforts funded by the MCBP shall have an associated QAPP and, if appropriate, a QMP, approved by the MCBP QAO and the PI. Specifically, the QAPP shall ensure that:

The level of data quality needed will be determined and stated before the data collection effort begins;

All environmental data generated and processed will reflect the quality and integrity established by the QAPP.

The QAPP documents the data quality objectives or "acceptance criteria" for a project, identifies the critical measurements to be performed, and discusses the quality assurance activities to be conducted during the sampling, analytical and validation phases of the project. All QAPPs shall adhere to *QA/R-5, EPA Requirements for Quality Assurance Project Plans (EPA 2001)*. Where possible, document control format as exhibited in this document shall be utilized.

To efficiently assess the quality system documentation needs of a project, the PI will complete Sections 1 and 2 of the Proposed Project Quality System Documentation Checklist. Section 3 of this Checklist will provide documentation that the planned project's QAPP has been completed by the grantee, submitted in a timely matter, and approved by the MCBP QAO. In

Section 4, the QAO gives the final approval for the beginning of the project after review of the project's completion of quality system criteria.

For all new environmental data collection activities a draft quality assurance project plan for review and approval is required prior to the initiation of data collection or data compilation activity. The PI shall notify the MCBP QAO regarding the processing of the grant during the planning phase. The PI has responsibility for his/her project and is the official contact with the funding recipient. However, the staff member must obtain concurrence from the MCBP QAO on all matters affecting quality assurance.

QAPPs shall be reviewed and approved in the context of the Project Data Quality Objectives prior to environmental data collection or compilation. QAPP review is a multi-faceted process that includes the MCBP QAO, the Executive Director, the PI, the grantee, and MCBP's Proposal Review Committee. The Proposal Review Committee is comprised of members of STAC (the Science and Technical Advisory Committee) and MCBP employees with applicable scientific expertise. The proper project personnel and scientific experts are identified and reviewed by the Proposal Committee when the project is proposed. Customers and suppliers are identified using the MCBP Procurement Manual (Appendix) as a reference. The proper project goals, objectives and issues are addressed during initial project review based on action items in MCBP's Comprehensive Conservation Management Plan (CCMP).

The proper schedule, resources, milestones, and applicable requirements are identified and tracked by the MCBP QAO and the PI using the MCBP Project Tracking program.

The manner, location, and timeliness of data acquisition, as well as its intended use and quality performance criteria are included in a set of SOP's that will be included or referenced in each QAPP. Project audits conducted by the MCBP QAO during environmental monitoring will assess if the SOP's are being applied as intended and are generating the expected quality of data.

The MCBP QAO shall notify the PI immediately of any problem areas identified in the review of the QAPP. Necessary changes will be jointly determined, and the PI will outline the corrective actions. A follow-up review of the required changes will be made by the MCBP QAO.

If no changes are required to an existing quality assurance project plan, the grant recipient is required to provide written documentation (e.g., a letter) to the PI stating that a review was conducted and no changes have occurred. The MCBP QAO must find the current QAPPs for these activities acceptable prior to the beginning of data collection activities.

The MCBP QAO maintains a current file of all approved QAPPs.



Upon completion of the environmental data collection activities, the PI shall also assess the actual performance of the planned activity and subsequent results according to the criteria described in the QAPP. This final report is given in written form to the MCBP QAO. Completed projects are also reviewed by appropriate scientific personnel. Distribution lists of personnel who need to receive quality assurance reports and information are to be maintained by the MCBP QAO.

## **5 DOCUMENTATION AND RECORDS**

Documentation on data base files is essential for drawing meaningful interpretations of the data contained in the data base. Additionally, data base management is dependent upon structured, easy-to-use documentation. MCBP has a document retention policy in place that is compliant with the Federal tax requirements for a 501(c) 990 organization.

The Program infrequently contracts environmental data collection services, and will be able to maintain records on site. Every data set funded by the MCBP will be accompanied by a dated file and master log documenting the source of the data, the contact for additional information, the sponsoring and collecting organizations, the reasons for collecting the data, published documents or reports associated with the data, and other items. Documents that have been revised, updated or produced as a subsequent edition will replace obsolete or superseded documents. The master log will reflect changes to the file. The MCBP QAO will ensure that obsolete or superseded SOP's and QA Reference documents are removed and destroyed from the QMP files and the possession of users when practical, and will provide the most recent documents to staff and investigators.

The MCBP QAO will house all documents associated with the MCBP QMP and contractual QAPPs in one filing cabinet at the Program office. Electronic documents and backup copies will also be the responsibility of the QAO. Upon completion of the environmental data collection activities the QAO will assess and document the actual performance of the planned activity and subsequent results according to the criteria described in the QAPP. A record of the assessment will be included in the Program file for each project. For ongoing environmental data collection programs, the QAPPs must be updated annually to accurately document any changes to collection, sample handling and storage, laboratory analysis, quality control, and data management activities. The funding recipient should notify the PI prior to changing the number of samples, the number of sites, or the number of parameters. If no changes are required to an existing quality assurance project plan, the funding recipient is required to provide written documentation (e.g., a letter) to the PI that a review was conducted and no changes have occurred.

The Program has always maintained an open policy regarding public access to Program documents. Generally, environmental data is collected at sites that are publicly accessible (waterways, stream and road crossings, public parks or protected wetlands). State or University investigators follow established SOPs when data is collected from privately owned areas. It will be the PI's responsibility to adhere to the

SOPs that are in accordance with EPA guidance and maintain chain of custody and confidentiality procedures for evidentiary records.

Records will be retained indefinitely as long as the data is being used and the policy and procedures are in effect. Obsolete records, reports and data bases will be destroyed when revised editions are made available. Documents pertaining to grant funding payments will be the responsibility of the Administrative Specialist after all the requirements are met to satisfy the RFP guidance. Documents and databases will be reproduced electronically and by hardcopy for backup purposes. All computer files are backed up on a central server daily, minimizing the risk of loss from a system failure.

## **6 COMPUTER HARDWARE AND SOFTWARE**

At the present time, the MCBP does not use specially designed computer hardware or software for environmental data. All hardware and software used by the MCBP are commercially available and involve specifically designed written programs. For Project Tracking, the PI and MCBP QAO utilize Microsoft Office Suite. The software allows for efficient tracking of the project and allows for the quality documentation to be stored in the same place. If future requirements involve more specifically designed software, appropriate modifications will be made to this QMP.

## **7 PLANNING**

The planning process begins with program-wide environmental data collection priorities documented in the MCBP Comprehensive Conservation & Management Plan (CCMP). The Program relies upon the staff Science Coordinator to recruit a group of informed participants from the MCBP Scientific & Technical Advisory Committee (STAC) to select and rank potential projects to conduct environmental data collections. The ratings for each proposal are sent to the Executive Director for a final selection of the grant recipients. Technical expertise and support is provided by an in-house staff member who manages the grants. Processes for the development and approval of QMPs and QAPPs are described in Sections 2.2 and 4.2. Requirements for these plans are communicated to grantees via the RFP and grant guidance.

## **8 IMPLEMENTATION OF WORK PROCESSES**

The MCBP PI and the grantee monitor work processes through collaborative efforts. Activities and outputs of the projects are presented to the Staff or Advisory Committee members who actually use the information. Each of the projects is overseen by a MCBP PI. They are responsible for initiating the project, reviewing the progress reports, receiving applicable data, and receiving reports. The PI is responsible for ensuring that the project proceeds according to the approved QAPP along with technical SOPs and generates the appropriate documents, in-line with the desires of the committee and MCBP. If the PI or grantee decides to make changes to the project, the PI documents the changes and notifies the MCBP QAO.

## **9 ASSESSMENT AND RESPONSE**

## 9.1 TECHNICAL SYSTEMS AUDIT

Technical systems audits, which focus on the actual quality control in environmental measurement data collection systems, are performed on a random basis by the MCBP QAO. In order to make the audit as effective as possible, the QAO collaborates with staff persons who are experienced in water quality chemistry, data collection technology, and quality control procedures. The QAO is also up to date on EPA QMP Briefings and has the authority and organizational freedom to access programs, managers, documents, and records. The audit addresses an examination of calibration records, sampling and measurement procedures, general laboratory conditions, support systems, equipment and facilities, maintenance and repair records, control charts, etc. These periodic audits will be documented and tracked.

If the audit detects project delinquency in QA/QC protocol, corrective changes will be jointly outlined by the MCBP PI and QAO. Documentation of corrective action is to be submitted by each facility to the QAO within 30 days of receipt of the technical audit report. Items not corrected within that period of time will be brought to the attention of the grantee, the involved MCBP PI, and the Executive Director. The PI has the authority to suspend or stop work in progress upon detection and identification of a situation affecting the quality of results. To prevent further noncompliance, the MCBP reserves the right to deny future contracts based on a behavioral precedence set by the grantee.

Technical systems audits reports are maintained by the MCBP QAO.

## 9.2 MANAGEMENT ASSESSMENTS

The MCBP QAO's role in the assessment process is one of internal oversight and coordination. As such, the QAO is independent of Principle Investigators. The QAO has the responsibility to annually review the MCBP QMP and make necessary revisions. This includes coordinating with other MCBP staff to identify and respond to QA/QC needs and requesting guidance or assistance from similar National Estuary Programs and EPA Region 3 Quality Managers. The assessment will include a quality system document review, file examination, and interviews of staff and principle investigators. The assessment will focus on recognizing the effectiveness of the existing quality system and noteworthy accomplishments as well as on the identification of nonconformance's and needed improvements. Any necessary corrective actions will be identified and implemented by the MCBP QAO in a timely fashion. Whenever a new QMP is developed or whenever significant revisions to the QMP are conducted, training will take place within 6 months of approval of the QMP in order to ensure members of the MCBP staff are fully informed of the quality system at any given time.

The QAO will also create a dated and paginated log to document the development, acceptance, implementation and management of the QMP.

Additionally, the QAO will insure that all MCBP staff will understand and implement improvements to all pertinent SOPs, QAPPs, and the QMP.

As part of the Annual QMP review process, senior management will review and assess the adequacy of the quality system to meet the needs of the Program. The MCBP management will undergo routine, independent Management Systems Reviews assessment where management controls, training, resources, personnel and accomplishments are reviewed on an as needed basis.

## **10 QUALITY IMPROVEMENT**

Continual improvement is focused more on improving the process, rather than on improving the output of the process. All staff members are responsible for quality improvement within their areas. Staff will be encouraged to find ways to improve the process and will be given the tools and management support to develop and implement the improvements.

Communication of critical activities of the Program is conducted interpersonally, via email and at program-wide staff meetings. Input for quality problems and suggested improvements are solicited electronically and verbally. The MCBP QAO is responsible for the overall quality improvement program, the function of which is to identify the cause and consequence of a problem, facilitate actions to prevent its recurrence, and evaluate the effectiveness of improvement activities. Acceptance of improvement suggestions and the implementation of new procedures will serve as an indicator of positive effectiveness. Actions or changes are documented by the MCBP QAO to ensure that effective new procedures become standard policy.

A document control system will ensure that the staff has the most current versions of the QMP and quality procedures. The QAO will be responsible for conducting staff training to implement new policies and procedures. Every effort will be made to convey the benefits of standardized policies and procedures and develop the support for improving the management system. For grant funded data collection activities the grant guidance will be updated and changes will be conveyed to applicants.

## REFERENCES

- 40 CFR 30.54, Code of Federal Regulations, "Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations." (URL: <https://www.gpo.gov/fdsys/pkg/CFR-2002-title40-vol1/pdf/CFR-2002-title40-vol1-part30.pdf>)
- 40 CFR 31.45, Code of Federal Regulations, "Uniform Administrative Requirements for Grants and Cooperative Agreement to State and Local Governments." (URL: <https://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol1/pdf/CFR-2012-title40-vol1-part31.pdf>)
- EPA Order CIO 2105-P-01-0 (May 2000). *EPA Quality Manual for Environmental Programs*, U.S. Environmental Protection Agency, Washington, DC. (URL: <https://www.epa.gov/sites/production/files/2013-10/documents/2105p010.pdf>)
- EPA Order CIO 2105.0 (May 2000). *Policy and Program Requirements for the Mandatory Agency-Wide Quality System Assurance Program*, U.S. Environmental Protection Agency, Washington, DC. (URL: [https://www.epa.gov/sites/production/files/2015-09/documents/epa\\_order\\_cio\\_21050.pdf](https://www.epa.gov/sites/production/files/2015-09/documents/epa_order_cio_21050.pdf))
- Maryland Coastal Bays Program, 2015. Comprehensive Conservation and Management Plan. Available from Maryland Coastal Bays Program, 8219 Stephen Decatur Highway, Berlin, MD 21811. (URL: <http://www.mdcoastalbays.org/pdf/ccmp.pdf>)
- U.S. Environmental Protection Agency, 2001. *EPA Requirements for Quality Management Plans (QA/R-2)*, EPA/240/B-01/002, Office of Environmental Information. (URL: <https://www.epa.gov/sites/production/files/2016-06/documents/r2-final.pdf>).
- U.S. Environmental Protection Agency, 2001. *EPA Requirements for Quality Assurance Project Plans (QA/R-5)*, EPA/240/B-01/003, Office of Environmental Information. (URL: [https://www.epa.gov/sites/production/files/2016-06/documents/r5-final\\_0.pdf](https://www.epa.gov/sites/production/files/2016-06/documents/r5-final_0.pdf)).
- U.S. Environmental Protection Agency, 2007. *Guidance for Preparing Standard Operating Procedures (SOPs) (QA/G-6)*, EPA/600/B-07/00, Office of Environmental Information. (URL: <https://www.epa.gov/sites/production/files/2015-06/documents/g6-final.pdf>).

Appendix A:

Proposed Project Quality System  
Documentation Checklist



## Proposed Project Quality System Documentation Checklist

The purpose of this checklist is to guide MCBP principle investigators and quality system staff through the processes of planning a project, reviewing the planning documentation, and complying with MCBP's quality system requirements. You may use this form, or equivalent documentation, for any IN-HOUSE work effort, WORK ASSIGNMENT, CONTRACT, COOPERATIVE AGREEMENT, GRANT, or INTERAGENCY AGREEMENT where MCBP provides funds or technical support.

### Section 1 - General Project Information

Brief Descriptive Project Title:

Project Start Date:

Anticipated Project Completion Date:

Principle Investigator:

Project Team Members:

Name of contractor or grantee (if any):

Yes	No	
		Is this project related to a specific environmental decision, regulation, or enforcement action?
		Will the EPA be collecting data during this project?
		Will an EPA contractor or grantee be collecting data during this project?
		Will data from other sources be used during this project?
		If so, were the data collected in association with this project or for some other purpose? (e.g., is this a secondary use of the data?)
Sources of other data (if any):		
		Is this a software/modeling development project?
		Is this a new contract, new work assignment, or new grant?

If the answer to **any** question above is "Yes," then complete the rest of this form.

If **all** answers above are "No," then sign this page and submit it with the procurement request or procurement initiation notice.

Principle Investigator's Signature

Date

**Section 2 - Quality System Documentation Requirements**  
(for projects involving environmental measurements or data)

The questions below are to be answered by the quality system staff member in order to establish the requirements for quality system documentation for the project.

Yes	No	Does the project require that:
		A written quality management plan or other document that describes the commitment of the offer's management to meet the quality requirements of the scope of work be included in the project plan, contract/cooperative agreement/grant proposal, etc.?
		A written quality assurance project plan (QAPP) be delivered as part of the project plan, contract proposal, grant, contract task order, etc.?
Quality system audits be conducted for the contract? <div style="display: flex; justify-content: space-around;"> <span>___ Pre-Award</span> <span>___ During Contract?</span> </div>		
		Procedures are in place to review data against acceptance criteria?
		Another form of documentation be used instead of a QAPP (see below)?

**Rationale, if no QAPP required:** (if another form of documentation is used, please specify it here)

**Please identify:**

Organization responsible for preparing the QAPP or other quality system documentation:

If EPA, name of author:

Due date for QAPP or other documentation:

Anticipated start date of data collection:

**Section 3 - Review and Approval of Quality System Documentation**  
(to be completed by the MCBP Quality Assurance Officer)

Reviewer for QAPP or other documentation:

Date review completed:

Date documentation approved:

Location of approved and signed documentation:

Yes	No	To be completed if QAPP has not been approved.
		Is the QAPP complete and approved?
		Have corrective changes been identified?
Date of grantee notification of necessary changes _____		
		Have the edits been made?

Principle Investigator's Signature      Date

Quality Assurance Officer's Signature      Date

**Section 4 - Management Review** *(to be completed by the MCBP Quality Assurance Officer before data collection begins)*

Yes	No	
		Are environmental data required for this project? (Section 1)
		Have requirements for the quality system documentation been established? (Section 2)
		Has the quality system documentation been reviewed and approved by both the Project Manager and the Quality Assurance Officer? (Section 3)
		If this is a contract, work assignment, task order, grant, cooperative agreement, or IAG, have the quality system requirements been included in the activity and documented on the appropriate forms?
		May this project proceed as planned?

**Comments:**

\_\_\_\_\_  
Quality Assurance Officer's Signature

\_\_\_\_\_  
Date

JAN 28 2020



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## Worcester County

Department of Environmental Programs

### Memorandum

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**To:** Harold L. Higgins, Chief Administrative Officer

**From:** Robert J. Mitchell, LEHS   
Director, Environmental Programs

**Subject:** **Steven Hershey Property - Gum Point Road**  
Letter on Alternative Sewer Connection Route

**Date:** January 27, 2020

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This memorandum is in follow-up to Mr. Cropper's correspondence of January 13, 2020 with regard to the proposed connection of his client's property to the Ocean Pines Sanitary Service Area. Mr. Cropper is referencing my email dated 12-20-19, where I relayed the position of the Sewer Committee on the sewer connection, and my answer on the septic question as the local Approving Authority.

Mr. Hershey is a property owner at the very end of Gum Point Rd and he would like to install a temporary connection to the Ocean Pines collection system so he can redevelop his property. He would abandon this connection when sewer was completed for the entirety of Gum Point Road. A quick drawing of the proposed connection, the property, and the approved line location for the community is attached along with the plan sheet for the portion of the routing plan for this community. To connect to the collection system at Baypointe Plantation and it would involve installation of a small-diameter, low pressure pipe along with a grinder vault at the subject property. The owner would purchase Ocean Pines EDUs for his structures. This connection would also involve horizontal boring under tidal wetlands, negotiating those permit(s) and potential easements to secure this connection, and the owner would need to complete a small projects agreement with the Department of Public Works.

This matter was discussed at the Sewer Committee meeting on December 12, 2019, and I communicated the answer within my email of 12-12-19 that also addressed septic issues on the property. I replied that the Master Sewer Routing Plan for the Greater Ocean Pines Area, prepared by Barry Isett & Associates, dated 11-7-07, and approved by the County Commissioners, is the plan for sewerage for properties within the Greater Ocean Pines Service Area (GOPSA). This

**Citizens and Government Working Together**



particular property is located within Zone 4 – the Turville Creek area of the plan. The plan for this particular zone is low pressure sewer installed within the County Right-of-Way (ROW) to serve the Gum Point Road Properties and some Taylorville properties. It does not include routes to connect properties in this particular zone that are different than what is shown in the master routing plan. The approved route includes service to Gum Point Road properties by low pressure sewer installed within the County ROW on the north side of the road. Mr. Hershey has proposed an alternate connection that was not approved under this plan. The proposed route through Baypoint Plantation is not an approved route of connection and could not be considered within this request. Connections to county infrastructure need to be in conformance with county standards. The small projects agreement is structured around these kinds of connections as the installed infrastructure is turned over to the county to operate and maintain. Adequately line sizes and correct routes of access are part of the examinations done by county staff on designs that accompany these agreements.

Mr. Cropper's argument in his letter regarding septic concerns do not relate to the sewer connection issue and my response on that matter was within my delegated responsibilities as the local Approving Authority for MDE. In a nutshell, the owner cannot utilize the existing holding tank serving the cottages for new construction by demolishing the cottages and replacing the cottages by moving the three-bedroom house. Under Code of Maryland Regulations (COMAR) 26.04.02.02 K, a holding tank may be used to "resolve an existing onsite sewage disposal failure as a community sewerage facility is not available and an on-site repair protective of public health is not possible." The holding tanks that the owner was allowed to install are for the existing cottages and were permitted to be installed to continue an existing use because there was no room on the property to safely repair the failed system. This is not an illogical decision, it is one made consistent with the regulation and informed by specific direction given to county staff by the Maryland Department of the Environment on the use of holding tanks. If Mr. Cropper wants to push ahead on this particular argument, he can have his client submit a construction permit which we will have to deny. He then would be offered rights of appeal under the Administrative Procedures Act, which he could initiate by requesting an informal conference with this office.

Regarding the argument on the alternative route, this route was approved by the County Commissioners. That plan was prepared to design how the properties within the the Greater Ocean Pines Service Area (GOPSA) were to connect to the Ocean Pines collection system. If you recall, both the Baypointe Plantation and Pennington Commons/Estate Communities were originally proposed to be served by package sewer plants. To prevent two package plants from being installed on the doorstep of the Ocean Pines Sanitary Service Area, County staff worked with the two developers on connections to Ocean Pines sewer infrastructure that coincided with Water and Sewerage Plan amendments and local action for Sanitary Service Area expansions done under the Public Works Article of our local code. The Baypointe sewer connection to Ocean Pines was provided for under those conditions and was included in the GOPSA amendment to the Master Water and Sewerage Plan.

The Gum Point community was part of the Turville Creek zone of the Master Routing Plan for GOPSA. The construction estimate prepared in 2007 was \$2.4MM for the cost to connect these properties. This would incur a per property cost that would be deemed unaffordable without grant funding. Grant funding is further complicated as the community is not designated, or eligible for



designation, as a priority funding area (PFA), negating use of grant funding in Maryland unless a Smart Growth exemption was obtained for a connection project. To date, some of these properties have been connected at the owner's expense. The community is the beneficiary of the force main installed by the Ocean Downs facility in their connection to the Ocean Pines Sanitary Area. That allowed these connections to occur as the prior connection routing plan would have been down Rt. 589 from the western end of Gum Point Road. Again, this connecting infrastructure to Ocean Downs was specified in the Water and Sewerage Plan Amendment for that project.

State wetland and construction permits that need to be obtained for the alternate connection proposed for Mr. Hershey would undergo a regulatory review at the state level. It would require coordination with local plans and we do not have that in this case. If an amendment were done to provide consistency in this case as Mr. Cropper suggests in his letter, then that could assist in obtaining MDE construction permits.

It is understandable that Mr. Cropper is concerned with the costs his client would need to incur to connect at their own expense. I would point out that our ratepayer's protection policy, which was an amendment to the Master Water and Sewerage Plan, states that "system costs which can be attributed to new growth and/or service area expansions shall be solely borne by the developers and/or property owners associated with the with the growth area or the service area's expansion." Mr. Hershey's expansion is within that definition of a property owner associated with a service area's expansion.

Extending collection and distribution lines in connection with expansion projects are expensive endeavors. There is not a refusal on the county's part to connect these properties. Project funding for the connection of a community of this magnitude is a bit more complicated as I have explained above.

If you have any questions or need additional information please let me know

Attachments

cc: Sewer Committee



Law Offices  
AYRES, JENKINS, GORDY & ALMAND, P.A.

6200 COASTAL HIGHWAY, SUITE 200

OCEAN CITY, MARYLAND 21842

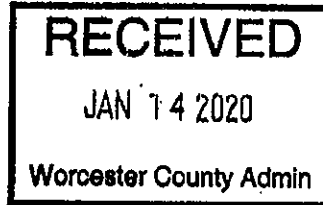
www.ajgalaw.com

GUY R. AYRES, III (1945-2019)  
M. DEAN JENKINS  
JAMES W. ALMAND  
WILLIAM E. ESHAM, III  
MARK SPENCER CROPPER  
BRUCE F. BRIGHT  
HEATHER E. STANSBURY  
RYAN D. BODLEY  
VICTORIA O'NEILL

OF COUNSEL  
HAROLD B. GORDY, JR.

EMAIL ADDRESS:  
mcropper@ajgalaw.com

(410) 723-1400  
FAX (410) 723-1861



January 13, 2020

*Copy: Bob Mitchell  
to draft cover memo for  
Commissioners meeting of 2/4  
- Sewer Committee - FYI*

County Commissioners of Worcester County  
Attn: Harold G. Higgins – Administrator  
Office of County Commissioners - Room 1103  
Worcester County Government Center  
One West Market Street  
Snow Hill, MD 21863

RE: Steve Hershey/Sewer for Tax Map 21, Parcel 75 on  
Eastern Terminus of Gum Point Road

Dear Mr. Higgins:

I represent Steven Hershey, who owns the improved real property on the east end of Gum Point Road with a mailing address of 11831 Gum Point Road, Berlin, MD 21842 also identified as Tax Map 21, Parcel 75 (the "Property"). The Property is presently improved with a single-family dwelling containing three bedrooms and two bathrooms. Also on the Property are a variety of motel-type cottages, similar to efficiencies, that are leased only during the summer seasonal months. I have attached as Exhibit "A" a copy of an "As Built" site plan that depicts the Property and those improvements.

The Property is not yet connected to any regional wastewater treatment plant such as the Ocean Pines Wastewater Treatment Plant ("OP Plant"). There exists a septic system with a holding tank that presently meets its sewer demands. However, because of various COMAR regulations, Bob Mitchell, Director of Environmental Programs for Worcester County, has notified my client that no new construction activity is permitted on the site until connection to the OP Plant occurs.

To my knowledge, there are no immediate plans for Worcester County (the "County") to install a wastewater distribution line from Maryland Route 589, along Gum Point Road, to the Property ("Gum Point Line"). However, the County did allow the developer of Bay Point Plantation to connect to the OP Plant ("Bay Point Line") for the development of that residential subdivision without waiting for the County to install the Gum Point Line or requiring the

developer to do so.

My client wishes to make certain changes to the Property. First, he would like to relocate the single-family dwelling from its existing site and place it where three of the cottages (in one structure) sit such that it is a mere swap of three bedrooms (in the house) for three bedrooms (in the cottages). Afterward, my client wishes to then replace that house with a new three-bedroom house. Therefore, in the end, there are no more bedrooms than exist today. Instead of having six bedrooms, three in cottages and three in a house, there would be six bedrooms divided between the two houses.

Mr. Mitchell has advised my client that until the Gum Point Line is installed, all my client can do is demolish the existing three-bedroom house and replace it with another three-bedroom house. But he is not permitted to move the existing house to where the three cottages sit (which would require that they be demolished). This makes no logical sense to me.

Accordingly, my client hired J. W. Salm Engineering, Inc. ("Salm") to formulate a possible solution to this dilemma. Attached hereto as Exhibit "B" is an email from Salm dated November 10, 2019, that proposes that my client, at his expense, would connect to the OP Plant at Bay Point Plantation, which is only a distance of approximately 2,200 linear feet. This would prevent my client from having to demolish the existing house. It could be relocated to where the three cottages exist (which would be demolished). The house would then be replaced with a new structure. Then, if, as and when the Gum Point Line is installed by the County, my client would (if required) disconnect from the Bay Point Line and connect to the Gum Point Line (also, at his expense). There would be no cost to the County and my client would not have to demolish the existing home.

As reflected on Exhibit "C" attached, Mr. Mitchell informed me that this proposal was discussed with the Sewer Committee and rejected. The Sewer Committee's position appears to be that Mr. Hershey must pay for and install the Gum Point Line in a manner that would accommodate all properties along Gum Point Road at a cost of not less than four times the cost to install the Bay Point Line. Otherwise, Mr. Hershey can only demolish the house, replace it with a new house and keep the three cottages.

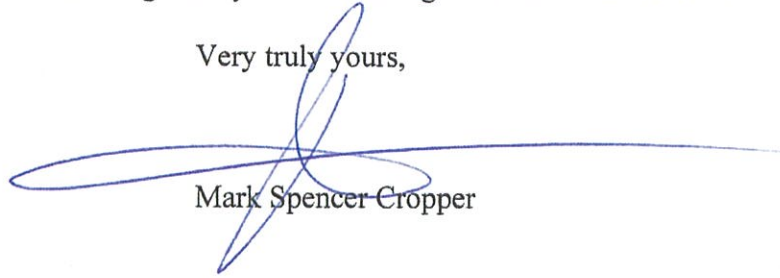
With all due respect to Mr. Mitchell and the Sewer Committee, I fail to understand the logic or fairness of the County's position as determined by Mr. Mitchell and the Sewer Committee. With my client's proposal, the existing holding tank and septic system would be abandoned, the Property (and all of its improvements) would then be served by a regional sewer facility (the OP Plant) and the Property would be significantly improved, which benefits Mr. Hershey and the County.

I fully realize that the Comprehensive Water and Sewer Plan may have to be amended to allow for the Bay Point Line to be installed. But that is a purely procedural matter that can be accomplished should the Commissioners choose to support this proposal. Otherwise, my client must continue to wait for an indefinite period of time for the County to fund and install the Gum Point Line before being able to continue improvements to the Property.

Simply put, it is unreasonable and unfair to expect this one property owner to bear the expense and burden to install the Gum Point Line (for the benefit of all property owners along Gum Point Road) when the County has refused to do so. This appears more unfair in light of the County allowing the Bay Point Plantation developer to avoid having to do so.

I respectfully request the opportunity to meet with the Commissioners to discuss this proposal. It is a matter that should be decided by the Commissioners, not just the Sewer Committee. I look forward to hearing from you and meeting with the Commissioners.

Very truly yours,

A handwritten signature in blue ink, consisting of a large, stylized 'M' and 'C' that are intertwined, with a horizontal line extending to the right.

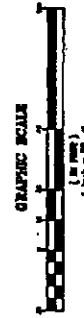
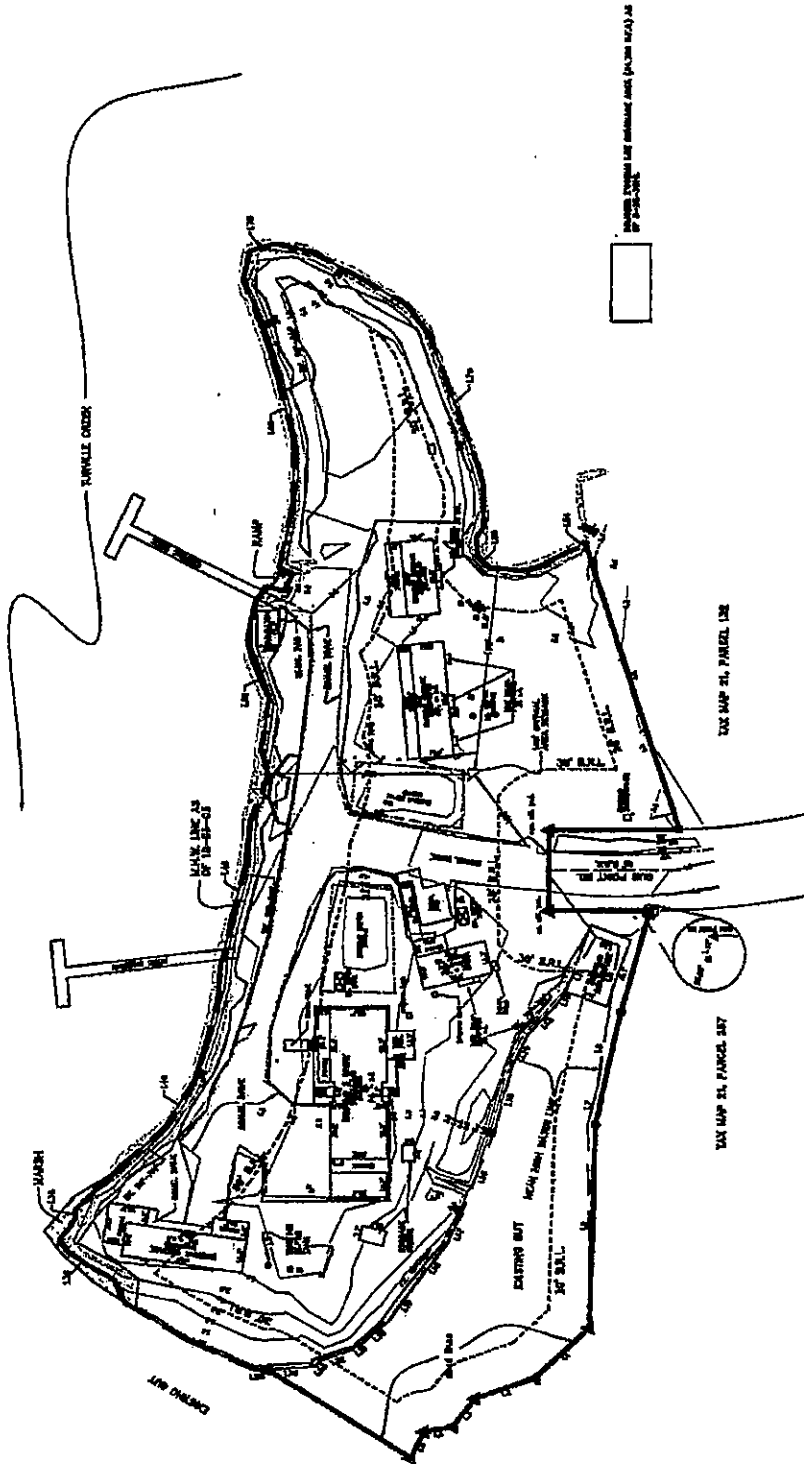
Mark Spencer Cropper

Enclosures

cc: Steve Hershey  
John Salm

MSC:slc

# Exhibit "A"



<b>Frank G. Lynch, Jr.</b> <b>&amp; Associates, Inc.</b> 1000 BROADWAY, NEW YORK, N.Y. 10018 (212) 693-1200 • FAX (212) 693-1201		PROJECT NO. 1000 SHEET 1 OF 1
<b>EXISTING CONDITIONS SURVEY</b>		DATE: 10-15-75 DRAWN BY: FRANK G. LYNCH, JR. CHECKED BY: FRANK G. LYNCH, JR.
<b>LANDS OF STEVE HERSEY</b> <b>TAX MAP 21, PARCEL 75</b> <b>THIRD TAX DISTRICT, WORCESTER COUNTY, MARYLAND</b>		DATE: 10-15-75 DRAWN BY: FRANK G. LYNCH, JR. CHECKED BY: FRANK G. LYNCH, JR.

## Exhibit "B"

**Mark Cropper**

---

**From:** John Salm <jsalm@jwse.com>  
**Sent:** Monday, November 18, 2019 4:12 PM  
**To:** Steve Hershey; Mark Cropper  
**Subject:** LP Sewer for Parcel 75, Map 21, Gum Point Road, Berlin, Worcester County, Maryland

Gentlemen:

I performed my site visit today. Bay Point Plantation has a green street sign so I am presuming that it is a County Road. It is 2,200 L.F. to the nearest sewer connection in Bay Point Plantation.

You will require a 1.5" diameter line. It will need to be drilled at least half the way to avoid conflicts and due to a very narrow land causeway. Estimated cost for public force main only is: \$44,000. You will still need to purchase the grinder pump(s) and the edus.

The route down Gum Point road is 0.8 mile +/- . It will need to be a 4-inch, then 3-inch then 2-inch then the 1.5-inch force main. The force main will encounter numerous conflicts as it follows the pavement down Gum Point Road. It will cost at least four times as much as the connection to Bay Point Plantation.

The connection to Bay Point Plantation will be designed to all appropriate standards but could be abandoned at a later date in which case you would hook-up to a County Built line on Gum Point Road. I am not sure at this time as to whether the W & S plan will need to be changed for a connection to bay Point.

Please let me know if you would like me to do anything further on this matter or if you have any questions.

**John W. Salm, III, P.E.**  
President  
**J. W. SALM ENGINEERING, INC.**  
office: 410-641-0126  
mobile: 410-251-4066

Exhibit "C"

**Stacia Cropper**

---

**From:** Robert Mitchell <bmitchell@co.worcester.md.us>  
**Sent:** Friday, December 20, 2019 1:43 PM  
**To:** Mark Cropper  
**Subject:** Hershey Gum Pt.

Mark-

I believe you wanted confirmation of the following (my answers in bold italics below):

Bob

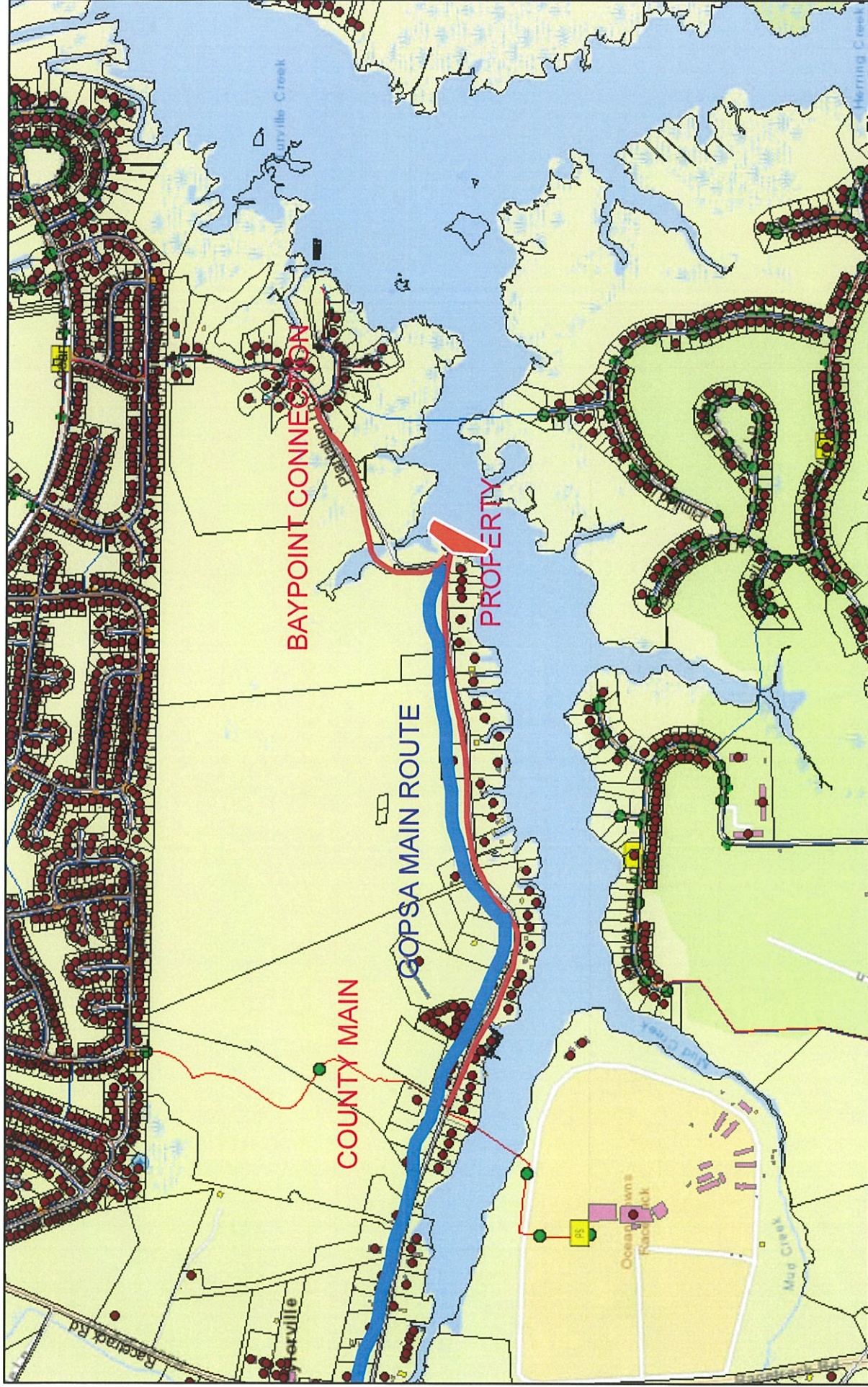
1. Pursuant to your email below to John Salm, the Hersheys can replace the existing 3 bedroom house with a new 3 bedroom house on the existing system, therefore, there would be no need to connect to Ocean Pines. ***The house would be subject to plan review and would need to conform to existing size limitations in place for the existing interim onsite water and sewer system that currently services the existing residence.***
2. If the Hersheys wish to relocate the existing 3 bedroom house on the property (to replace other existing structures, not in addition to them) and replace it with a new 3 bedroom house, this is what you previously indicated would not be allowed on the existing system. A connection to Ocean Pines would be required. If so, I have asked you to present to the Sewer Committee the proposal of the Hersheys to connect to Ocean Pines (near Baypoint Plantation) until such time that a distribution line is installed along Gum Point Rd. If, as and when that happens, the Hersheys (if required) would disconnect from the temporary connection and connect to the Gum Point Rd. line.

***This topic was reviewed last week at our committee meeting. The Master Sewer Routing Plan for the Greater Ocean Pines Area, prepared by Barry Isett & Associates, dated 11-7-07, and approved by the County Commissioners, is the plan for sewerage for properties within the Greater Ocean Pines Service Area (GOPSA). This particular property is located within Zone 4 – Turville Creek area of the plan. The plan for this particular zone is low pressure sewer installed within the County Right-of-Way (ROW) to serve the Gum Point Road Properties and some Taylorville properties. It does not include routes to connect properties in this particular zone that are different than what is shown in the master plan. The approved route includes service to Gum Point Road properties by low pressure sewer installed within the County ROW on the north side of the road. You have proposed an alternate connection that was not approved under this plan. If your client desires to connect to the Ocean Pines WWTP and collection system utilizing the approved route, they would need to submit a small projects agreement to Public Works and work with them on their requirements to construct that connection. The proposed route through Baypoint Plantation is not an approved route of connection.***

Robert J. Mitchell, LEHS, REHS  
Director  
Worcester County  
Department of Environmental Programs  
1 West Market Street, Room 1306  
Snow Hill, MD 21863  
Phone (410) 632-1220 x 1601



# Hershey Property - Gum Point



1/28/2020 3:27:39 AM

**Legend**

- Override 1** (Red line)
- Override 2** (Blue line)
- Property Lines** (Black outline)
- Override 1** (Red line)

**Buildings**

- All Other Building Types** (Yellow square)
- Abandoned** (Green square)

**Scale**

- 0 0.1 0.2 0.35 0.4 mi
- 0 0.17 0.35 0.7 km

**Sources:** Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), Web AppBuilder for ArcGIS

This map is intended for planning purposes only and not for regulatory application.



expansion or enlargement of water production, treatment, or distribution facilities or any sewage treatment, disposal, or collection facilities as may be necessary to accommodate the new developments.

#### 1.4 PROCEDURES FOR PLAN AMENDMENTS

##### 1.4.1 General

Proposed amendments to the Water and Sewerage Plan will be considered by the County Commissioners only if the amendments are consistent with the provisions of the Comprehensive Development Plan and existing zoning classification. If a proposed water or sewage project is not consistent with the existing zoning classification, the amendment may be proposed in conjunction with an application for zoning reclassification. In such event the Water and Sewerage Plan amendment hearing shall be conducted jointly with the rezoning hearing.

##### 1.4.2 Application for Amendments

All applications for amendments to the Comprehensive Water and Sewerage Plan shall be filed with the Department of Planning, Permits and Inspections. Applications shall contain such information and shall be submitted on such forms as promulgated by the Department (see Appendix D). In addition to the information required, the Department may require such additional information as determined necessary to properly evaluate the application. A fee, as set by Resolution of the County Commissioners, shall be submitted with the application.

##### 1.4.3 Review

The application shall be reviewed by the Environmental Programs Section and the Planning Section of the Department of Planning, Permits and Inspections and shall be submitted to the Planning Commission for its review. If appropriate, the application shall also be forwarded to the Department of Water and Wastewater Services for review and comments. If additional technical review is required the Department of Planning, Permits and Inspections may, with the approval of the County Commissioners, arrange for independent technical advice on the application. The applicant shall be notified of the need for such additional technical advice and shall be required to reimburse the County for the cost of such. The Department of Planning, Permits and Inspections shall submit the application, along with the recommendation and comments of the Environmental Programs Section, the Planning Section and Planning Commission, to the County Commissioners for a public hearing.

#### 1.4.4 County Commissioners' Approval

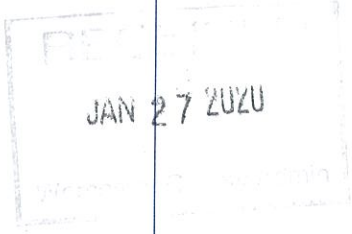
Upon submission of the application and recommendations, a public hearing on the requested amendment shall be advertised as required by law and regulation. Notices shall be sent to any affected municipality, the Department of Water and Wastewater Services, and the State Department of the Environment. The County Commissioners may approve, disapprove, or approve with amendments and conditions the requested amendments to the Comprehensive Water and Sewerage Plan. The approved amendments shall be forwarded to the State Department of the Environment for review and approval by that agency. Upon notification from the State Department of the Environment that the amendment has been approved by the State it shall be incorporated into the Worcester County Comprehensive Water and Sewerage Plan.

Amendments which do not pertain to the addition or deletion of water or sewer systems and which are considered to be relatively minor revisions, such as the upgrading of a water service area from W-3 to W-1, can be processed by administrative procedures delegated to the Department of Planning, Permits and Inspections as opposed to requiring a public hearing before the County Commissioners. Such minor amendments must go through the same review process at the local level as major amendments, as described in 1.4.3. They must be considered by the Planning Commission and found to be consistent with the County's Comprehensive Development Plan and must subsequently be reviewed and approved by the County Commissioners. The County Commissioners' Resolution officially approving such minor amendments as well as the pertinent revised narrative, charts, tables or maps, must be forwarded to the State Department of the Environment annually.

#### 1.4.5 Biennial Update

As required by State regulation, the Water and Sewerage Plan shall be updated biennially. The Department of Planning, Permits and Inspections shall supply data forms to all owners and operators of water and sewerage systems for the submission of amendments or changes as may be required.

All amendments and changes shall be reviewed by the Department of Planning, Permits and Inspections, the Planning Commission and the Department of Water and Wastewater Services if appropriate. The County Commissioners shall hold a public hearing on the update and proposed changes.



12

**Worcester County**  
**DEPARTMENT OF PUBLIC WORKS**

6113 TIMMONS ROAD  
SNOW HILL, MARYLAND 21863

Also Request Approval  
for Chief Administrative  
Officer to approve future  
extensions

**JOHN H. TUSTIN, P.E.**  
DIRECTOR

**JOHN S. ROSS, P.E.**  
DEPUTY DIRECTOR

TEL: 410-632-5623  
FAX: 410-632-1753

**MEMORANDUM**

**TO: Harold L. Higgins, Chief Administrative Officer**  
**FROM: John H. Tustin, P.E., Director**  
**DATE: January 27, 2020**  
**SUBJECT: Groundwater Monitoring & Analytical Services at the Three Closed Landfills – Pocomoke, Berlin and Snow Hill, Calendar Years 2020-2022**

**DIVISIONS**

**MAINTENANCE**  
TEL: 410-632-3766  
FAX: 410-632-1753

**ROADS**  
TEL: 410-632-2244  
FAX: 410-632-0020

**SOLID WASTE**  
TEL: 410-632-3177  
FAX: 410-632-3000

**FLEET  
MANAGEMENT**  
TEL: 410-632-5675  
FAX: 410-632-1753

**WATER AND  
WASTEWATER**  
TEL: 410-641-5251  
FAX: 410-641-5185

I have received the attached proposal dated January 10, 2020, from EA Science and Technology to continue the program of groundwater monitoring and analytical services at the referenced closed landfill sites. The current contract that was originally signed in February of 2016, allowed for five (5), two-year extensions to the contract and we would like to exercise the second of the five extensions. The quoted price for the next 2 year program is \$85,040.89.

As noted in the attached Maryland Department of the Environment letter dated March 8, 2019, additional groundwater testing requirements will be required beginning July 1, 2020 to demonstrate compliance with the Federal maximum contaminant level (MCL) of 2 additional compounds which have been tentatively classified as known or suspected human carcinogens. Funding on the annual basis of \$50,000 has been, and should be in future years, approved in the General Fund operating budget within the Department of Public Works Administration account 100.1203.200.6530.070.

It is recommended that the Commissioners review this proposal from EA for the next two years (2020-2022) and approve this second of five contract extensions to meet the regulatory requirements imposed upon the County by MDE.

Should you have any questions in the mean time, please do not hesitate to contact me.

Attachments

cc: Mike Mitchell, Solid Waste Superintendent  
Jessica Wilson, Enterprise Fund Controller





# Maryland

## Department of the Environment

Larry Hogan, Governor  
Boyd Rutherford, Lt. Governor

Ben Crumbles, Secretary  
Horacio Tablada, Deputy Secretary

March 8, 2019

Dear Facility Operator:

The Maryland Department of the Environment ("Department") is providing this notice as to a change in monitoring and reporting requirements. As of July 1, 2020, the Department will require all facilities conducting monitoring regulated under Code of Maryland Regulations (COMAR) 26.04.07.09, 26.04.07.17, 26.04.07.20 and/or 40 CFR Part 258 to demonstrate compliance with the federal maximum contaminant level (MCL) for 1,2-dibromoethane (EDB) and 1,2-dibromo-3-chloropropane (DBCP).

The MCL for EDB is 0.05 µg/L and for DBCP is 0.2 µg/L. EDB and DBCP have been tentatively classified as known or suspected human or mammalian carcinogens. The maximum contaminant level goal (MCLG) for EDB is zero. However, the Environmental Protection Agency (EPA) set the MCL at 0.05 µg/L because EPA believes, given present technology and resources, this is the lowest level to which drinking water systems can reasonably be required to remove this contaminant should it occur in drinking water.

The EPA method most commonly used to analyze for organic constituents in groundwater is Method 8260B, which is a gas chromatograph/mass spectrometry method. The operational method detection limit (MDL) achieved for Method 8260B for both EDB and DBCP is 1.0 µg/L. Method 8260B is not sensitive enough to detect EDB or DBCP at their MCLs even in a laboratory sample. In contrast to Method 8260B, the MDL for EDB and DBCP using Method 8011 is approximately 0.01 µg/L; therefore, it is sufficiently sensitive to measure EDB and DCPB at their respective MCL.

As of July 1, 2020, you will be required to demonstrate compliance with the MCL by utilizing Method 8011 to analyze for EDB and DCPB. If you are unable to comply with the July 1, 2020 deadline or have questions concerning this matter, please contact Andrew Grenzer, Section Head, Investigations & Remediation Section, at (410) 537-3315 or [andrew.grenzer@maryland.gov](mailto:andrew.grenzer@maryland.gov).

Sincerely,

Martha Hynson, Chief  
Solid Waste Operations Division

MH:ATG:atg

cc: Ms. Kaley Laleker  
Mr. Brian Coblenz



EA Engineering, Science,  
and Technology, Inc., PBC

225 Schilling Circle, Suite 400  
Hunt Valley, MD 21031  
Telephone: 410-584-7000  
Fax: 410-771-1625  
www.eaest.com

January 10, 2020  
Proposal No. 0791047B

Mr. John Tustin, P.E., Director  
Worcester County Department of Public Works  
6113 Timmons Road  
Snow Hill, Maryland 21863

**Re: Proposal for Groundwater Monitoring and Analytical Services at the Three Closed  
Landfill Facilities (Pocomoke, Berlin, and Snow Hill) - Calendar Years 2020-2021**

Dear Mr. Tustin:

EA Engineering, Science, and Technology, Inc., PBC (EA) is once again pleased to submit this proposal to the Worcester County Department of Public Works for sampling and reporting of groundwater at the Pocomoke, Snow Hill, and Berlin Landfill Facilities located in Worcester County. The work described under this proposal will be performed in accordance with the same terms and conditions as our previous work with Worcester County. The work under this contract will be performed over a two-year period, consisting of four semi-annual monitoring events. All work will be completed by December 2021.

The scope of services for groundwater monitoring covered by this proposal includes: sampling and analysis of 18 monitoring wells at the three facilities described above (Task 1), statistical analysis and reporting of each semi-annual groundwater-monitoring event, including a groundwater contour map of each facility (Task 2). Groundwater monitoring will be performed on a semi-annual basis for a period of two years and will typically coincide with the work for the monitoring program at the Central Landfill. The required sampling and reporting will be performed in accordance with the attached Scope of Work (Attachment A1) and in accordance with the existing Facility Monitoring Program document for the Pocomoke, Snow Hill, and Berlin Landfill Facilities prepared by EA, revised February 2016, as required by the Maryland Department of the Environment (MDE). Per MDE's letter dated 8 March 2019, this scope of work includes the additional analysis to be used for the analysis of 1,2-dibromoethane (EDB) and 1,2-dibromo-3-chloropropane (DBCP) effective 1 July 2020.

On behalf of Worcester County, EA will utilize the analytical laboratory services of Maryland Spectral Services located in Baltimore, Maryland, to perform the required analytical services. This laboratory is very cost-effective to the County and EA has developed a strong working relationship with them on other projects. Maryland Spectral Services has agreed to maintain their pricing levels constant for the two-year period of this contract.

The cost of this effort has increased over our prior contract mainly due to the additional analysis that becomes effective 1 July 2020, as well as increasing labor costs of field personnel and reporting requirements with MDE. However, we have proposed to utilize experienced field personnel from other EA offices whom perform groundwater sampling and monitoring regularly, in an effort to reduce labor costs and improve efficiency.





Enclosed for your consideration is the lump sum cost for these services of \$85,040.89 and is presented in a detailed breakdown in Attachment B.

The services proposed herein are a natural extension of EA's previous involvement with the closed landfill facilities and Worcester County. We wish to thank you for this opportunity to help you meet your solid waste objectives, and continue to look forward to working and supporting you on this project.

It is our sincere desire to continue to be of service at this and other facilities in Worcester County. If you have any questions, do not hesitate to give me a call at (410)-329-5133.

Sincerely,

EA Engineering, Science, and Technology, Inc., PBC

A handwritten signature in black ink, reading 'Geoffrey A. Tizard, II', is written over the typed name and title.

Geoffrey A. Tizard, II, P.E.  
Senior Project Manager

Enclosures

cc: D. Kolar, P.E. (EA)  
L. Oakes, P.E. (EA)

## ATTACHMENT A1

### Scope of Services Worcester County Closed Landfill Facilities Sampling and Reporting of Groundwater

#### *Task 1 – Field Sampling and Analysis*

EA will perform four semi-annual groundwater sampling events during calendar years 2020 and 2021 at the Worcester County Closed Landfills (Pocomoke, Snow Hill, and Berlin Landfill Facilities) in accordance with the Facilities' most recently updated Facility Monitoring Program prepared by EA, February 2016 which includes monitoring and reporting requirements for the three Closed Landfills.

The semi-annual sampling events will occur during the Spring and Fall each year and will include low flow sampling of four wells at the Pocomoke Landfill (P-MW-01, P-MW-02, P-MW-03, and P-MW-04); six wells at the Snow Hill Landfill (EA-1, EA-2, EA-3, EA-4, EA-5, and EA-6), and eight wells at the Berlin Landfill (B-MW-01S, B-MW-02S, B-MW-03S, B-MW-05S, B-MW-07S, B-MW-09, B-MW-10S, and B-MW-11). Additionally, water level gauging will be performed at three shallow wells at the Berlin Landfill (B-MW-04S, B-MW-06S, and B-MW-08S).

Groundwater samples will be analyzed for the parameters shown in Table I and II of the Facility Monitoring Program (see attached). Quality control samples will include:

- 1 rinsate blank per sampling event (assume 4 total)
- 1 field blank and 1 trip plank per sampling date (assume 3 each per event, 12 total)
- 1 field duplicate sample per 10 samples (assume 3 per event, 12 total)

Duplicate samples will be collected utilizing low-flow sampling techniques. The samples will be analyzed for the parameters identified in Tables I and II, and the Appendix II parameters, as required. Groundwater analysis will be performed by a MDE certified independent laboratory (Maryland Spectral Services). Per MDE's letter dated 8 March 2019, Method 8011 is to be used for the analysis of 1,2-dibromoethane (EDB) and 1,2-dibromo-3-chloropropane (DBCP) effective 1 July 2020. This is in addition to the analysis currently performed.

In addition to sampling, EA will perform gauging of each well prior to sample collection.

#### *Task 2 – Preparation of Groundwater Contour Maps, Statistical Analysis, and Reporting*

EA will prepare four semi-annual reports per landfill (12 reports total) on water quality containing a summary of findings and interpretive discussion of groundwater analytical results for the sampling event. Per the Facility Monitoring Program approved by MDE, the report will include the following:

- Narrative/Summary
- Statistical Analysis
- Historical Data Tables (time series format)
- Groundwater Elevations and Contour Map (historical)
- Laboratory Analytical Data (laboratory reports)
- Field Records of Well Gauging, Purging, and Sampling
- Chain of Custody

EA will utilize depth to water levels (gauging) recorded prior to sampling at each well to develop a groundwater contour map for each landfill.

EA will submit one copy of each report to the Maryland Department of the Environment (MDE) on behalf of the County and two copies of the report to the County for each sampling event (four events total). Reports will be submitted to MDE in accordance with the permit, 90 days following the end of the first quarter (June 30<sup>th</sup>) and 90 days following the end of the third quarter (December 31<sup>st</sup>) reporting period, unless otherwise agreed upon.

TABLE I  
MONITORING PARAMETERS

VOLATILE ORGANIC COMPOUNDS	PQL (ppb)
Acetone	5.0
Acrylonitrile	5.0
Benzene	1.0
Bromochloromethane	1.0
Bromodichloromethane	1.0
Bromoform	1.0
Bromomethane	1.0
2-Butanone	5.0
Carbon disulfide	1.0
Carbon tetrachloride	1.0
Chlorobenzene	1.0
Chloroethane	1.0
Chloroform	1.0
Chloromethane	1.0
Dibromochloromethane	1.0
1,2-Dibromo-3-chloropropane	1.0
1,2 – Dibromoethane (EDB)	1.0
Dibromomethane	1.0
1,2 – Dichlorobenzene	1.0
1,4 – Dichlorobenzene	1.0
Trans-1,4-dichloro-2-butene	5.0
1,1-Dichloroethane	1.0
1,2-Dichloroethane	1.0
1,1-Dichloroethene	1.0
Cis-1,2-Dichloroethene	1.0
Trans-1,2-Dichloroethene	1.0
Methylene chloride	1.0
1,2-Dichloropropane	1.0
Trans-1,3-Dichloropropene	1.0
Cis-1,3-Dichloropropene	1.0
Ethylbenzene	1.0
2-Hexanone	5.0
Iodomethane	1.0
4-Methyl-2-pentanone	5.0
Methyl Tertiary Butyl Ether	2.0
Styrene	1.0
1,1,1,2-Tetrachloroethane	1.0
1,1,2,2-Tetrachloroethane	1.0
Tetrachloroethene	1.0
Toluene	1.0
1,1,1-Trichloroethane	1.0
1,1,2-Trichloroethane	1.0
Trichloroethene	1.0
Trichlorofluoromethane	1.0
1,2,3-Trichloropropane	1.0
Vinyl acetate	1.0
Vinyl chloride	1.0
Xylene	1.0

**TABLE II**  
**MONITORING PARAMETERS**

ELEMENTS AND INDICATOR PARAMETERS	PQL (ppm)
Total Antimony	0.002
Total Arsenic	0.002
Total Barium	0.010
Total Beryllium	0.002
Total Cadmium	0.004
Total Chromium	0.010
Total Calcium	0.08
Total Cobalt	0.010
Total Copper	0.010
Total Iron	0.005
Total Lead	0.002
Total Nickel	0.011
Total Magnesium	0.004
Total Manganese	0.0100
Total Mercury	0.0002
Total Potassium	0.39
Total Selenium	0.035
Total Silver	0.010
Total Sodium	0.2
Total Thallium	0.002
Total Vanadium	0.010
Total Zinc	0.010
pH	0.1 (SU)
Alkalinity	1
Hardness	0.5
Chloride	0.39
Specific conductance	1
Nitrate	0.06
Chemical oxygen demand	10
Turbidity	0.11 (NTU)
Ammonia	1
Sulfate	0.38
Total dissolved solids	10

Pocomoke, Snow Hill, and Berlin Landfill Facilities  
Groundwater Monitoring and Statistical Analysis  
Calendar Years 2020-2021 (Four Semi-Annual Groundwater Events)

**Total Tasks 1 and 2**

EA Labor	Hours	Rate	Effort
Senior Technical Review	28	\$185.00	\$5,180.00
Project Manager	10	\$262.00	\$2,620.00
Senior Civil Engineer	0	\$166.00	\$0.00
Senior Geologist	6	\$160.00	\$960.00
Geologist	0	\$90.00	\$0.00
Senior Scientist	0	\$160.00	\$0.00
Mid Level Engineer	28	\$120.00	\$3,360.00
Staff Engineer	152	\$90.00	\$13,680.00
Engineering Technician	152	\$84.00	\$12,768.00
CADD	6	\$91.00	\$546.00
Clerical	6	\$64.00	\$384.00
Word Processing	6	\$146.00	\$876.00
<b>Total Personnel Effort</b>			<b>\$40,374.00</b>
<b>Other Direct Costs</b>			
Mobile Phone	0 minute	\$0.12	\$0.00
Digital Camera	0 days	\$9.06	\$0.00
Copies	2500 pages	\$0.07	\$175.00
Color Copies	12 pages	\$0.16	\$1.92
Report Preparation Materials	12 inch	\$24.92	\$299.04
Shipping	4 ea	\$200.00	\$800.00
Auto	0 days	\$67.59	\$0.00
Auto mileage	0 miles	\$0.26	\$0.00
Truck	12 days	\$120.00	\$1,440.00
Truck Mileage	400 miles	\$0.42	\$168.00
Generator	12 days	\$82.68	\$992.16
2" Submersible Pump	12 days	\$42.16	\$505.92
Water Level Indicator	12 days	\$31.80	\$381.60
Water Quality Meter	12 days	\$159.00	\$1,908.00
Supplies	2 ls	\$200.00	\$400.00
Per Diem	0 days	\$100.00	\$0.00
<b>Total Other Direct Costs</b>			<b>\$7,071.64</b>
<b>Analytical</b>			
Water Quality Analysis - Wells	100 each	\$294.00	\$29,400.00
Water Quality Analysis - 8011 Method	75 each	\$75.00	\$5,625.00
Water Quality Analysis - Trip Blanks	12 each	\$65.00	\$780.00
<b>Subtotal Analytical</b>			<b>\$35,805.00</b>
<b>Mark-up on Analytical @ 5%</b>			<b>\$1,790.25</b>
<b>Total Analytical</b>			<b>\$37,595.25</b>
<b>TOTAL TASK</b>			<b>\$85,040.89</b>



Pocomoke, Snow Hill, and Berlin Landfill Facilities  
Groundwater Monitoring and Statistical Analysis  
Calendar Years 2020-2021 (Four Semi-Annual Groundwater Events)

**Task 1: Groundwater Sampling and Gauging**

EA Labor	Hours	Rate	Effort
Senior Technical Review	0	\$185.00	\$0.00
Project Manager	2	\$262.00	\$524.00
Senior Civil Engineer	0	\$166.00	\$0.00
Senior Geologist	0	\$160.00	\$0.00
Geologist	0	\$90.00	\$0.00
Senior Scientist	0	\$160.00	\$0.00
Mid Level Engineer	4	\$120.00	\$480.00
Staff Engineer	0	\$90.00	\$0.00
Engineering Technician	152	\$84.00	\$12,768.00
CADD	0	\$91.00	\$0.00
Clerical	0	\$64.00	\$0.00
Word Processing	0	\$146.00	\$0.00
<b>Total Personnel Effort</b>			<b>\$13,772.00</b>
<b>Other Direct Costs</b>			
Mobile Phone	0 minute	\$0.12	\$0.00
Digital Camera	0 days	\$9.06	\$0.00
Copies	0 pages	\$0.07	\$0.00
Color Copies	0 pages	\$0.16	\$0.00
Report Preparation Materials	0 inch	\$24.92	\$0.00
Shipping	0 ea	\$200.00	\$0.00
Auto	0 days	\$67.59	\$0.00
Auto mileage	0 miles	\$0.26	\$0.00
Truck	12 days	\$120.00	\$1,440.00
Truck Mileage	400 miles	\$0.42	\$168.00
Generator	12 days	\$82.68	\$992.16
2" Submersible Pump	12 days	\$42.16	\$505.92
Water Level Indicator	12 days	\$31.80	\$381.60
Water Quality Meter	12 days	\$159.00	\$1,908.00
Supplies	2 ls	\$200.00	\$400.00
Per Diem	0 days	\$100.00	\$0.00
<b>Total Other Direct Costs</b>			<b>\$5,795.68</b>
<b>Analytical</b>			
Water Quality Analysis - Wells	100 each	\$294.00	\$29,400.00
	101 each	\$75.00	\$7,575.00
Water Quality Analysis - Trip Blanks	12 each	\$65.00	\$780.00
<b>Subtotal Analytical</b>			<b>\$37,755.00</b>
<b>Mark-up on Analytical @ 5%</b>			<b>\$1,887.75</b>
<b>Total Analytical</b>			<b>\$39,642.75</b>
<b>TOTAL TASK</b>			<b>\$59,210.43</b>

Pocomoke, Snow Hill, and Berlin Landfill Facilities  
Groundwater Monitoring and Statistical Analysis  
Calendar Years 2020-2021 (Four Semi-Annual Groundwater Events)

**Task 2: Semi-Annual Groundwater Monitoring Reports**

EA Labor	Hours	Rate	Effort
Senior Technical Review	28	\$185.00	\$5,180.00
Project Manager	8	\$262.00	\$2,096.00
Senior Civil Engineer	0	\$166.00	\$0.00
Senior Geologist	6	\$160.00	\$960.00
Geologist	0	\$90.00	\$0.00
Senior Scientist	0	\$160.00	\$0.00
Mid Level Engineer	24	\$120.00	\$2,880.00
Staff Engineer	152	\$90.00	\$13,680.00
Engineering Technician	0	\$84.00	\$0.00
CADD	6	\$91.00	\$546.00
Clerical	6	\$64.00	\$384.00
Word Processing	6	\$146.00	\$876.00
<b>Total Personnel Effort</b>			<b>\$26,602.00</b>
<b>Other Direct Costs</b>			
Mobile Phone	0 minute	\$0.12	\$0.00
Digital Camera	0 days	\$9.06	\$0.00
Copies	2500 pages	\$0.07	\$175.00
Color Copies	12 pages	\$0.16	\$1.92
Report Preparation Materials	12 inch	\$24.92	\$299.04
Shipping	4 ea	\$200.00	\$800.00
Auto	0 days	\$67.59	\$0.00
Auto mileage	0 miles	\$0.26	\$0.00
Truck	0 days	\$120.00	\$0.00
Truck Mileage	0 miles	\$0.42	\$0.00
Generator	0 days	\$82.68	\$0.00
2" Submersible Pump	0 days	\$42.16	\$0.00
Water Level Indicator	0 days	\$31.80	\$0.00
Water Quality Meter	0 days	\$159.00	\$0.00
Supplies	0 ls	\$200.00	\$0.00
Per Diem	0 days	\$100.00	\$0.00
<b>Total Other Direct Costs</b>			<b>\$1,275.96</b>
<b>Analytical</b>			
Water Quality Analysis - Wells	0 each	\$294.00	\$0.00
	1 each	\$75.00	\$75.00
Water Quality Analysis - Trip Blanks	0 each	\$65.00	\$0.00
<b>Subtotal Analytical</b>			<b>\$75.00</b>
<b>Mark-up on Analytical @ 5%</b>			<b>\$3.75</b>
<b>Total Analytical</b>			<b>\$78.75</b>
<b>TOTAL TASK</b>			<b>\$27,956.71</b>

Pocomoke, Snow Hill, and Berlin Landfill Facilities  
Groundwater Monitoring and Statistical Analysis  
Calendar Years 2020-2021 (Four Semi-Annual Groundwater Events)

**Task 1: Groundwater Sampling and Gauging**

	Senior Technical Reviewer	Project Manager	Senior Geologist	Mid Level Engineer	Staff Engineer	Engineering Technician	CADD	Clerical
Ground Water Gauging Events	0	1	0	0	0	68	0	0
Ground Water Quality Testing	0	1	0	4	0	84	0	0
Total - Task 1	0	2	0	4	0	152	0	0

**Task 2: Semi-Annual Groundwater Monitoring Reports**

	Senior Technical Reviewer	Project Manager	Senior Geologist	Mid Level Engineer	Staff Engineer	CADD	Word Processing	Clerical
Statistical Analyses	16	2	0	8	48	0	0	0
Ground Water Contour Plan	0	2	6	8	8	6	0	0
Ground Water Report	12	4	0	8	96	0	6	6
Total - Task 2	28	8	6	24	152	6	6	6

EA as used herein means EA Engineering, Science, and Technology, Inc., PBC

Client as used herein means the other party to this contract.

WHEREAS, EA provides an extensive range of integrated and comprehensive consulting, engineering, scientific, and analytical services; and

WHEREAS, Client desires to utilize EA's services.

NOW, THEREFORE, for good and valuable consideration, EA agrees to provide the professional services described herein, and Client agrees to accept and pay for such services, all in accordance with the following terms and conditions:

1. **Definitions** The following terms shall have the meanings set forth below whenever they are used in this Agreement:
  - a) "Scope of Work" (SOW) shall mean the description of the services to be provided by EA as mutually agreed upon by EA and Client, and will be performed on either a firm fixed price (FFP) or time and materials (T&M) basis. The SOW and the Price will be set out in the attached Exhibit "A"(s) (or EA's Proposal) as described below, incorporated by reference into this Agreement.
  - b) "Documentation" shall mean deliverable documentation as described in the SOW.
  - c) "Equipment" shall mean all indoor and outdoor equipment used by EA at Client sites for the purpose of providing services as described in the SOW.
  - d) "Proprietary Information" shall mean all data, information, manuals, materials, trade secrets, patents, products, processes, plans, whether in written, graphic or oral form, and similar proprietary know-how of EA.
2. **Ordering** EA services sought by the Client shall be ordered as follows:
  - a) In response to either a written or verbal request from Client, EA will prepare a written proposal that shall minimally contain a SOW, cost and form of compensation (FFP or T&M).
  - b) Each EA Proposal shall be dated and sequentially numbered as Exhibit A1, A2, A3, etc. and reference this EA Consulting Service Agreement contract number.
  - c) If acceptable, the Client will sign and date the EA proposal acknowledging acceptance of the costs of the services to be rendered by EA.
3. **Compensation / Billing** EA's invoices will be issued at least monthly and are payable upon receipt. Invoices shall reference the appropriate EA Proposal

## CONSULTING SERVICES CONTRACT

Contract # \_\_\_\_\_

Date: \_\_\_\_\_

Letter or Exhibit A numbers. Balances thirty (30) days past due are subject to interest at 1.5% per month. EA may suspend services under any Client Agreement until all past due accounts have been paid.

The SOW is often not fully definable prior to the execution of this Agreement as investigation may uncover additional facts and information requiring an alteration in the SOW and/or the Price for the services. For services on a time and materials basis, the proposed fees are EA's best estimate of the charges required to complete the SOW. EA will inform Client of any material changes to either the SOW or the Price that may be required and which may alter the terms of this Agreement.

Costs and schedule commitments are subject to renegotiation for unreasonable delays caused by Client's failure to provide free access to sampling areas, specified facilities, or information, or for delays caused by unpredictable occurrences, or force majeure, such as fires, floods, strikes, riots, unavailability of labor or materials or services, acts of God or of the public enemy, or acts or regulations of any governmental agency. Temporary work stoppage caused by any of the above may result in additional cost beyond that outlined in this Agreement.

In the event EA is required to respond to a subpoena, government inquiry or other legal process related to the services in connection with a proceeding to which it is not a party, Client shall reimburse EA for its costs and compensate EA at its then standard rates for the time spent gathering information and documents. Client agrees to compensate EA at the rate of one and one-half times EA's then current hourly rates for time spent in any deposition, hearing, proceeding or trial.

For services provided on a time-and-materials basis, the minimum time segment is four (4) hours for field work and one (1) hour for office work. The rental or use of EA's Equipment will be charged to the project in accordance with EA's "Corporate Equipment Rate Billing Schedule" which is either incorporated into the rates shown in Exhibit B, or is available upon Client's request. Equipment rates are subject to annual adjustment each September. EA's labor rates for services provided on a time-and-materials basis are fixed for one year with annual adjustment upon notice to Client.

Expenses related to the services and reimbursable by Client ("Other Direct Costs") include without limitation, travel and living expenses, phone, FAX, overnight delivery services, postage, shipping, and production costs; identifiable drafting and word processing supplies; equipment usage and rental fees; and expendable materials and supplies. Other Direct Costs are reimbursable by Client and are billed at EA's cost plus 20 percent.



EA Engineering,  
Science, and  
Technology, Inc., PBC

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Date: \_\_\_\_\_

Subconsultant and/or subcontractor costs are reimbursable by Client and are billed at EA's cost plus 20%. Where applicable, any local or state taxes or fees (except state income taxes) are in addition to any quoted price/cost.

4. **Termination** This Agreement may be terminated by either party in the event of substantial failure by the other party to fulfill its obligations under this Agreement through no fault of the terminating party. Such termination is effected upon providing: (1) not less than thirty (30) calendar days written notice, and

(2) an opportunity for consultation with the terminating party prior to termination. Client will be responsible for all services and direct expenses associated with the project through the effective date of cancellation, plus reasonable fee(s) and/or expenses for reallocation and demobilization of personnel and equipment.

5. **Confidential Information / Inventions** All Proprietary Information furnished by EA in connection with this Agreement, but not developed as a result of work under this Agreement or under prior agreements between Client and EA, shall be held confidential by Client, and returned to EA within thirty (30) days of the completion of the services or conclusion of the litigation wherein EA's services were provided.

All inventions, techniques, and improvements held by EA to be proprietary or trade secrets of EA prior to any use on behalf of Client, as well as all inventions, techniques, and improvements developed by EA independent of the services rendered to Client under this Agreement, remain the property of EA. Documents provided by Client will remain the Client's property, but EA may retain one confidential file copy.

6. **Standard of Care** EA will prepare all work and provide services in accordance with generally accepted professional practices ordinarily exercised by reputable companies performing the same or similar services in the same geographic area. NO WARRANTIES OR GUARANTIES, EXPRESS OR IMPLIED, ARE MADE WITH RESPECT TO ANY GOODS OR SERVICES PROVIDED UNDER THIS AGREEMENT, AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED.

Client shall furnish documents and information reasonably within Client's control and deemed necessary by EA for proper performance of its services. EA may rely upon Client-provided documents and information in performing the services required under this Agreement and EA assumes no responsibility or liability for their accuracy.

Client agrees to advise EA, no later than upon the execution of this Agreement, of any hazardous substance or any condition, known or that reasonably should be known by Client, existing in, on, or near the

site where EA's services are to be performed, that presents a potential danger to human health, the environment, or EA's equipment. Client agrees to a continuing obligation to provide EA related information as it becomes available to the Client. By virtue of entering into this Agreement or providing services hereunder, EA does not assume control of, or responsibility as an operator, waste generator or otherwise for the site or the person(s) in charge of the site, or undertake responsibility for reporting to any federal, state or local public agencies any conditions at the site that may present a potential danger to public health, safety or the environment. Client agrees to notify the appropriate federal, state or local public agencies as required by law; or otherwise to disclose, in a timely manner, any information that may be necessary to prevent damage to human health, safety, or the environment.

Upon Client's request, EA's work product may be provided on magnetic media. By such request, Client agrees that the written copy retained by EA in its files shall be the official base document. The Client will retain one conformed written copy. EA makes no warranty or representation to Client that the magnetic copy is accurate or complete. Any modifications of such magnetic copy by Client shall be at Client's sole risk and without liability to EA. Such magnetic copy is subject to all conditions of this Agreement.

7. **Indemnification** Each party shall indemnify, defend and hold harmless the other party from and against all liability, loss, cost, expense, or damage caused by the indemnifying party's negligent acts or negligent omissions in the performance of this contract. However in the event of any loss, damage or liability, whether to person or to property, arising out of the sole negligence of either EA or Client, such party will assume full responsibility for any liability arising thereof and hold harmless the other party. EA and Client further agree that if either EA or Client engages in willful misconduct, such party shall assume full responsibility for any liability arising thereof irrespective of the nature and degree of the other party's negligence, and will indemnify and hold harmless the other party. In no event shall EA be liable for any special, incidental, economic, or consequential damages whatsoever, regardless of the legal theory under which such damages may be incurred. In no event will EA's liability under this provision or Agreement exceed the lesser of the fees actually paid to EA under this Agreement or \$50,000.

For claims related to or involving pollution, toxic substances or hazardous wastes or for any other claims arising from underground hidden or undisclosed hazards, Client agrees to release, defend, indemnify and hold harmless EA and its officers, directors, employees, agents, consultants, and subcontractors from all claims, damages, losses, and expenses, including, but not limited to, reasonable fees and expenses of attorneys and



EA Engineering,  
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Technology, Inc., PBC

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consultants, and court costs, arising out of the performance of this Agreement. Such indemnification and release includes claims which arise out of the actual, alleged, or threatened dispersal, escape, or release of chemicals, wastes, liquids, gases or any other material, irritant, contaminant or pollutant regardless of the legal theory under which such damages may be incurred.

EA's field personnel will avoid hazards or utilities that are visible to them at the site. EA is not responsible for any damage or loss to property owned by Client or third parties due undisclosed or unknown surface or subsurface conditions, except to the extent such damage or loss is a direct result of EA's gross negligence.

8. **Severability** If any term or provision of this Agreement is held or deemed to be invalid or unenforceable, in whole or in part, by a court of competent jurisdiction, this Agreement shall be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Agreement.
9. **Third Party Rights** EA's services under this Agreement are being performed solely for the benefit of Client, and no other entity shall have any claim against EA because of this Agreement or the performance or nonperformance of services provided by EA hereunder.
10. **Entire Agreement** This Agreement contains the entire agreement of the parties. It may not be modified or terminated orally. Any modification to these terms and conditions without the written approval of EA shall be null and void. In no event will the terms of any purchase order, work order or any other document provided by Client modify or amend this Agreement, even if it is signed by EA, unless EA signs a written statement expressly indicating that such terms supersede the terms of this Agreement. Any such terms are expressly rejected by EA.
11. **Assignment** EA reserves the right to assign this Agreement to its affiliates, subsidiaries, or successors as necessary in order to effectively carry out and complete the services specified by this Agreement.
12. **Governing Law** This Agreement shall be deemed made in, and in all respects interpreted, construed, and governed by, the laws of the State of Maryland, U.S.A. All disputes arising hereunder are to be resolved in the state and federal courts having jurisdiction of such disputes sitting in the State of Maryland or hearing appeals therefrom. Both parties consent to the jurisdiction of such courts over them for the purposes of this Agreement, and agree to accept service of process by registered mail.

### ATTACHMENTS

Exhibit A Statement of Work  
(May be added by reference to EA Proposal Letter(s))

Exhibit B EA Price Schedule, and/or  
EA Labor Rates and,  
EA Equipment Cost Rate Schedule  
(May be added by reference to EA Proposal Letter(s))

EA ENGINEERING, SCIENCE, AND TECHNOLOGY,  
INC., PBC

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

### CLIENT

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



JAN 28 2020



DEPARTMENT OF  
DEVELOPMENT REVIEW AND PERMITTING

**Worcester County**

ZONING DIVISION  
BUILDING DIVISION  
DATA RESEARCH DIVISION

GOVERNMENT CENTER  
ONE WEST MARKET STREET, ROOM 1201  
SNOW HILL, MARYLAND 21863

TEL: 410-632-1200 / FAX: 410-632-3008  
<http://www.co.worcester.md.us/departments/drp>

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ADMINISTRATIVE DIVISION  
CUSTOMER SERVICE DIVISION  
TECHNICAL SERVICE DIVISION

## MEMORANDUM

TO: Harold L. Higgins, Chief Administrative Officer  
FROM: Edward A. Tudor, Director *EAT*  
DATE: January 27, 2020  
RE: Rezoning Case No. 422 - M & G Route 50 Land, LLC, Applicant/  
Joseph E. Moore, Attorney

\*\*\*\*\*

Attached please find the County Commissioners' Findings of Fact and Resolution the staff drafted relative to the above referenced rezoning case. As you are aware, the public hearing was held by the County Commissioners on January 21, 2020. Once the County Commissioners adopt and execute these Findings of Fact and Resolution please forward signed copies to me so that I may notify the appropriate parties.

If you have any questions or need any further information, please do not hesitate to contact me.

phw  
Attachments

DRAFT

IN THE MATTER OF

\*

THE REZONING APPLICATION OF

\*

REZONING CASE NO. 422

M & G ROUTE 50 LAND, LLC

\*

\*\*\*\*\*

**FINDINGS OF FACT**

Subsequent to a public hearing held on January 21, 2020 and after a review of the entire record, all pertinent plans and all testimony, the Worcester County Commissioners hereby adopt the findings of the Worcester County Planning Commission and also make the following additional findings of fact as the County Commissioners' complete findings of fact pursuant to the provisions of ZS 1-113 of the Zoning and Subdivision Control Article of the Code of Public Local Laws of Worcester County, Maryland.

Regarding the specifics of Rezoning Case No. 422: This case seeks to rezone approximately 18.65 acres of land (hereinafter referred to as the petitioned area) located on the northerly side of MD Route 346 and the southerly side of US Route 50, west of Berlin, from A-1 Agricultural District to C-2 General Commercial District. The petitioned area is shown as Parcels 47 and 318 on Tax Map 20.

Applicant's testimony before the County Commissioners: Joseph E. Moore, attorney representing the applicant, began his presentation by stating that the petitioned area is located at the westerly gateway to Berlin and is a very visible entrance to the Town. He related that while the applicant had originally sought to be annexed into the Town of Berlin, the two parties were unable to come to a mutual agreement but the Town did not object to the rezoning. Mr. Moore provided as Applicant's Exhibit No. 1 an aerial photograph of the petitioned area, showing US Route 50 and MD Route 346 as well as the neighboring properties, including the Delmarva Power substation immediately to the east. Submitted as Applicant's Exhibit No. 2 was a zoning map showing the gateway area between MD Route 346, US Route 50 and MD Route 818. Mr. Moore noted that this map shows the extensive amount of R-2 Suburban Residential District zoning located in this vicinity which extends all the way to MD Route 818. He asserted that the petitioned area is the only property in this gateway that is not zoned for development. The portion of the Comprehensive Plan's Land Use Map showing the petitioned area and surrounding properties was submitted as Applicant's Exhibit No. 3. Mr. Moore pointed out that this map illustrates that the petitioned area is primarily within the Growth Area Land Use Category, with a small portion within the Agriculture Land Use Category.

Mr. Moore called Hugh Cropper, IV, land use attorney, as his first witness. Mr. Cropper stated that he had been in practice for 31 years and had participated in both the 1992 and 2009 comprehensive rezonings. He explained that he has some knowledge of agriculture, as he owns six agricultural properties, leases to farmers, and does some farming activity himself as well as provides legal representation to farmers. He stated that, in his opinion, the site cannot be farmed without difficulty due to its odd shape, small size, and the location of power lines, guyed wires, ditches and wooded areas. He maintained that the



location and long, narrow shape of the petitioned area has caused access limitations and that the site is too small and misshapen to be utilized by large farm equipment. Mr. Cropper noted that the Comprehensive Plan encourages the protection of large tracts of agriculturally zoned and utilized lands, yet the petitioned area is only 18 acres in size. He asserted that a farmer would only till this site to either keep the weeds down or for insurance purposes.

Mr. Moore submitted a photo showing the approach to the US Route 50/MD Route 346 junction from the west as Applicant's Exhibit No. 4. Applicant's Exhibit No. 5 was a photo of the junction and petitioned area facing east. Mr. Moore stated that there is no direct access to the petitioned area from US Route 50 and that MD Route 346 will function as a service road for the property. Applicant's Exhibit No. 6 was another photo showing the petitioned area from the junction of US Route 50 and MD Route 346. Mr. Moore then submitted another aerial photo showing the petitioned area and environs as Applicant's Exhibit No. 7. Mr. Cropper stated that because the petitioned area is shown in the Comprehensive Plan as being within a Growth Area, it should have been given a zoning district classification other than agriculture. He asserted that there is actually very little growth area in Worcester County and that originally around Snow Hill has been de-annexed. He stated that the petitioned area is not appropriate for residential zoning because of the close proximity of the two highways and the Delmarva Power substation, a large, industrial type use. Three photos of this substation were introduced as Applicant's Exhibits No. 8, 9 and 10. Mr. Moore introduced an aerial photo of the US Route 50 corridor between the junction with MD Route 346, to the west of Berlin, and the intersection with MD Route 818, on the east, as Applicant's Exhibit No. 11 and stated that the distance between these two intersections is 1.8 miles. The intersection at MD Route 818 is the closest commercial zoning to the petitioned area. He stated that the US Route 50/Seahawk Road/Friendship Road intersection, another commercially zoned area, is 2.9 miles from the petitioned area. He asserted that most commercial zoning in the US Route 50 corridor is 4.8 miles away, in the vicinity of MD Route 589 and extending east. An aerial photograph of the US Route 50 corridor extending from the petitioned area on the west to the junction with MD Route 589 on the east was submitted as Applicant's Exhibit No. 12. Mr. Moore contended that the area to the west of Berlin is thus underserved with commercial zoning. Mr. Cropper testified that approximately 25 acres of commercial zoning in the corridor has been downzoned to other classifications since the 2009 comprehensive rezoning. He reiterated that it was his belief that there is a mistake in the petitioned area's existing A-1 Agricultural District zoning and contended that commercial zoning would be more appropriate in terms of the objectives of the Comprehensive Plan. An aerial photo of the US Route 50 corridor extending from Dale Road on the west to the petitioned area on the east was submitted as Applicant's Exhibit No. 13.

Mr. Moore called Betty Tustin, traffic engineer, as his next witness. He provided a traffic study dated September 30, 2019 prepared by Mrs. Tustin of the Traffic Group as Applicant's Exhibit No. 14. Mrs. Tustin stated that this traffic study concluded that the proposed commercial use of the petitioned area will not have an adverse impact on future traffic during any peak hours, with a Level of Service A being maintained on all roadways and at both proposed entrances. Mrs. Tustin analyzed the system based upon designs of both 50,000 and 80,000 square feet in gross floor area of commercial space and at no point



did the traffic drop below a Level of Service A regardless of what size development she considered.

Mr. Moore called John Salm, professional engineer, as his next witness. Mr. Salm testified that he had evaluated the soils on the petitioned area to determine the feasibility of providing an on-site wastewater treatment and disposal system. He stated that based upon his review, there are an adequate amount of on-site soils to enable a reasonable commercial use. He stated that the figures he came up with are the basis for the calculations Mrs. Tustin utilized in the traffic study.

Mr. Moore called Chris McCabe, environmental consultant, as his next witness. A letter dated July 24, 2017 to Kenneth W. Redinger of Kenneth W. Redinger Environmental Services from Steve Dawson of the Maryland Department of the Environment (MDE) with attached nontidal wetland review comments was submitted as Applicant's Exhibit No. 15. Mr. McCabe testified that he had reviewed the 2017 Redinger report which was given to MDE regarding the petitioned area's onsite soils and MDE's response. He stated that the site has hydric soils and MDE had approved the nontidal wetland delineation which had been performed on the petitioned area. He asserted that the impact to the nontidal wetlands anticipated by proposed development of the site is less than five thousand square feet and MDE will issue a permit for such impact once the zoning coincides with the proposed uses.

Mr. Moore stated that the population of Berlin has grown significantly in the last thirty years. He asserted that downtown Berlin, where commercial goods and services are provided, is full and cannot accommodate any additional commercial uses. He contended that the increased population therefore needs commercial services that can be conveniently provided, particularly to the west of Berlin, and asserted that the petitioned area is an appropriate location because it is so close to the Town. Mr. Moore reiterated that the Comprehensive Plan classifies the petitioned area as being within a designated Growth Area and noted that the Comprehensive Plan calls for employment centers to be located close to population centers. He introduced a copy of various excerpts from the Comprehensive Plan as Applicant's Exhibit No. 16. Mr. Moore closed his presentation by again noting that commercial centers require adequate existing roadways and the petitioned area's location at Berlin's westerly gateway, on both US Route 50 and MD Route 346, makes it an appropriate location for general commercial zoning. He asserted that the existing agricultural zoning is therefore a mistake.

Protestants' testimony before the County Commissioners: No protestants appeared to speak before the County Commissioners.

Interested parties' testimony before the County Commissioners: No interested parties appeared to speak before the County Commissioners.

The County Commissioners' findings regarding the definition of the neighborhood: Based upon the findings of the Planning Commission, the County Commissioners find that because Mr. Moore was basing his argument for rezoning solely upon a claim of mistake in existing zoning, a definition of the neighborhood was not applicable.



The County Commissioners' findings regarding population change in the area: The County Commissioners concur with Mr. Moore's assertions and the Planning Commission's finding that there has been a significant change to the population of Berlin in the last thirty years.

The County Commissioners' findings regarding availability of public facilities: Based upon the Planning Commission's findings of fact and recommendation, the County Commissioners find that as it pertains to wastewater disposal and the provision of potable water, Robert J. Mitchell, Director of the Department of Environmental Programs, indicated in his response memo (copy attached to the Planning Commission's findings) that the subject properties have designations of Sewer and Water Service Categories S-3 and W-3 (Service within a 6 to 10 year timeframe) in the Master Water and Sewerage Plan. He stated to the Planning Commission that sewer and water could not be extended to the petitioned area until S-1 and W-1 designations are approved. He further stated that those designations would come with annexation and that where a property must be annexed in order to be connected to a water or sewer system, that system would not be considered directly available until that annexation is substantially completed. He noted that the property is not being considered for annexation by the Town of Berlin at this time. Mr. Mitchell stated in his response memo that his department's well and septic records show the properties were improved with existing individual well and septic before abandonment. He stated that that capacity would have to be reestablished and that would include seasonal testing to explore what proposed commercial uses could be supported by approved interim onsite sewage systems. According to the Planning Commission's findings, neither John H. Tustin, P. E., Director of Public Works, or John Ross, Deputy Director of Public Works, submitted any comments. According to the Worcester County Soil Survey the primary soil types on the petitioned area have severe limitations to on-site wastewater disposal. The County Commissioners find that John Salm testified before them that he had evaluated the soils on the petitioned area to determine the feasibility of providing an on-site wastewater treatment and disposal system and had determined that there are an adequate amount of on-site soils to enable a reasonable commercial use. Upon questioning by the County Commissioners, Mr. Mitchell testified that he concurred with Mr. Salm's conclusions. Based upon the Planning Commission's findings of fact, the County Commissioners find that fire and ambulance service will be available from the Berlin Volunteer Fire Company's main facility on Main Street or the substation on US Route 50, both approximately five minutes away. No comments were received from the fire company with regard to this review. Police protection will be available from the Maryland State Police Barracks in Berlin, approximately two minutes away, and the Worcester County Sheriff's Department in Snow Hill, approximately thirty minutes away. No comments were received from the Maryland State Police Barracks or from the Sheriff's Department. The petitioned area is within the area served by the following schools: Buckingham Elementary School, Berlin Intermediate School, Stephen Decatur Middle School, and Stephen Decatur High School. No comments were received from the Worcester County Board of Education (WCBOE). In consideration of their review, the County Commissioners find that there will be no negative impacts to public facilities and services resulting from the proposed rezoning.

The County Commissioners' findings regarding present and future transportation patterns: Based upon the Planning Commission's findings of fact and recommendation, the



County Commissioners find that the petitioned area fronts on and currently has access to MD Route 346 (Old Ocean City Road), a State-owned and -maintained roadway. The petitioned area also has frontage on US Route 50, also state-owned and -maintained, but this segment is denied access. Thus, all access to the petitioned area must be from MD Route 346. The Comprehensive Plan does not make any statements or recommendations with regard to MD Route 346 specifically but § ZS 1-326 of the Zoning Code classifies it as a minor collector highway. The Comprehensive Plan classifies US Route 50 as a multi-lane divided primary highway/arterial highway and recommends that development be limited until capacity is no longer impacted and that the amount of commercial zoning along US Route 50 should be reduced to maintain its capacity. No comments were received from the State Highway Administration District 1 with regard to this application. Frank J. Adkins, Worcester County Roads Superintendent, responded by memo (copy attached to the Planning Commission's findings of fact) that he had no comment at this time. The County Commissioners find that Betty Tustin, a traffic engineer, had carried out a traffic study which analyzed traffic impacts resulting from up to 80,000 square feet of commercial use on the petitioned area and that this study determined that all roadways and entrances would continue to operate at Level of Service A. Based upon their review, the County Commissioners find that there will be no negative impact to the transportation patterns arising from the proposed rezoning of the petitioned area.

The County Commissioners' findings regarding compatibility with existing and proposed development and existing environmental conditions in the area, including having no adverse impact to waters included on the State's impaired waters list or having an established total maximum daily load requirement: Based upon the Planning Commission's findings and the testimony of the applicant's representatives, the County Commissioners find that the petitioned area is at present undeveloped. Based upon the testimony of Chris McCabe, the County Commissioners find that there is an area of nontidal wetlands on the petitioned area and the proposed development will result in impacts of less than 5,000 square feet to them. Mr. McCabe also testified to the County Commissioners that an application has been submitted to the Maryland Department of the Environment for these proposed nontidal wetland impacts and has been conceptually approved, with final approval to be granted once the zoning concurs with the proposed uses. Given the petitioned area's location between US Route 50 and MD Route 346 on the westerly side of Berlin, the County Commissioners agree with Mr. Moore's assertion that it constitutes a gateway to Berlin. Additionally, as did the Planning Commission, the County Commissioners concur that the petitioned area is not conducive to either agricultural or residential use given its highway location, small size and odd shape as well as the industrial nature of the adjacent power substation and the overhead power lines and associated easement located on the petitioned area. The County Commissioners agree with the Planning Commission's conclusion that the proposed rezoning will serve the needs of the Town of Berlin and surrounding area and that there will be no adverse effects on the environment as a result of the change in land use and zoning. Based upon their review, the County Commissioners find that the proposed rezoning of the petitioned area from A-1 Agricultural District to C-2 General Commercial District is compatible with existing and proposed development and existing environmental conditions in the area.



The County Commissioners' findings regarding compatibility with the County's Comprehensive Plan: Based upon the Planning Commission's findings and the testimony of the applicant's representatives, the County Commissioners find that according to the Comprehensive Plan and associated land use plan map, the majority of the petitioned area lies within the Growth Area Land Use Category, with a small portion within the Agriculture Land Use Category. With regard to the Growth Area category the Comprehensive Plan states that this category designates areas outside incorporated areas that are suitable and desirable for future planned growth, including new and existing locations which contain limited wetlands, hydric soils, floodplains and contiguous forests, are comprised of generally larger parcels, are situated to be cost-effectively served with adequate public sanitary and other services, are located near employment, retailing and other services, and are served by adequate existing roadways (Level of Service C or better) or can be readily served. The Comprehensive Plan also states that Growth Areas identify generalized locations for planned new development and will accommodate most new growth. Adequate transportation and other public facilities must be in place at the time of development. With regard to the Agriculture Land Use category the Comprehensive Plan states that the importance of agriculture to the County cannot be overstated. Its significance is economic, cultural, environmental, and aesthetic. Agriculture is simply the bedrock of the County's way of life. The County must do all it can do to preserve farming as a viable industry. This category is reserved for farming, forestry and related industries with minimal residential and other incompatible uses permitted. Large contiguous areas of productive farms and forest shall be maintained for agricultural uses and residential and other conflicting land uses, although permitted, are discouraged. Based upon the testimony of the applicant's representatives and the Planning Commission's findings of fact, the County Commissioners find that the petitioned area is located in a gateway location on the westerly side of Berlin, in close proximity to the corporate limits. The County Commissioners concur with the Planning Commission's conclusion that due to the irregular shape of the petitioned area and its location between two major roadways as well as its proximity to the power substation, the site is not conducive to either agricultural or residential use. Based upon their review the County Commissioners find that the proposed rezoning of the petitioned area from A-1 Agriculture District to C-2 General Commercial District is compatible with the Comprehensive Plan and in keeping with its goals and objectives.

The County Commissioners' findings regarding the recommendation of the Planning Commission: The County Commissioners find that the Planning Commission gave a favorable recommendation to the rezoning of the petitioned area from A-1 Agriculture District to C-2 General Commercial District. Having made the above findings of fact, the County Commissioners concur with the recommendation of the Planning Commission and adopt its findings.

Decision of the County Commissioners: As a result of the testimony and evidence presented before the County Commissioners and the findings as set forth above, the County Commissioners find that there is a mistake in the existing zoning of the petitioned area. The County Commissioners find that the petitioned area is within a designated Growth Area and at a gateway location for Berlin, an area of significantly increased population over the last 30 years. Additionally, commercial service locations are very limited to the west of Berlin. The petitioned area's location between US Route 50 and MD Route 346 and the

DRAFT

adjacent power substation render the site unattractive for residential use, yet its small size and irregular shape make farming with today's large equipment difficult. The Planning Commission found that for these reasons it was a mistake to retain the A-1 Agricultural District zoning classification during the 2009 comprehensive rezoning and determined that commercial zoning and use of the petitioned area would be more appropriate. The County Commissioners agree with this conclusion. Based upon their review and in consideration of their findings, the County Commissioners conclude that a change in zoning would be more desirable in terms of the objectives of the Comprehensive Plan and hereby approve Rezoning Case No. 422 and thus rezone the petitioned area, shown on Tax Map 20 as Parcels 47 and 318, from A-1 Agricultural District to C-2 General Commercial District.

Adopted as of January 21, 2020. Reduced to writing and signed February 4, 2020.

ATTEST:

COUNTY COMMISSIONERS OF  
WORCESTER COUNTY, MARYLAND

\_\_\_\_\_  
Harold L. Higgins  
Chief Administrative Officer

\_\_\_\_\_  
Joseph M. Mitrecic, President

\_\_\_\_\_  
Theodore J. Elder, Vice President

\_\_\_\_\_  
Anthony W. Bertino, Jr.

\_\_\_\_\_  
Madison J. Bunting, Jr.

\_\_\_\_\_  
James C. Church

\_\_\_\_\_  
Joshua C. Nordstrom

\_\_\_\_\_  
Diana Purnell



**ZONING RECLASSIFICATION RESOLUTION NO. 20-01**

A RESOLUTION OF THE COUNTY COMMISSIONERS OF WORCESTER COUNTY, MARYLAND, PURSUANT TO § ZS 1-113 OF THE ZONING AND SUBDIVISION CONTROL ARTICLE OF THE CODE OF PUBLIC LOCAL LAWS OF WORCESTER COUNTY, MARYLAND, CHANGING THE ZONING CLASSIFICATION OF CERTAIN PARCELS OF LAND SHOWN ON TAX MAP 20 AS PARCELS 47 AND 318 FROM A-1 AGRICULTURAL DISTRICT TO C-2 GENERAL COMMERCIAL DISTRICT.

WHEREAS, pursuant to § ZS 1-113 of the Zoning and Subdivision Control Article of the Code of Public Local Laws of Worcester County, Maryland, M & G Route 50 Land, LLC, applicant, and Joseph E. Moore, applicant's attorney, filed a petition for the rezoning of approximately 18.65 acres of land shown on Tax Map 20 as Parcels 47 and 318, located on the northerly side of MD Route 346 and the southerly side of US Route 50, west of Berlin, requesting a change in zoning classification thereof from A-1 Agricultural District to C-2 General Commercial District; and

WHEREAS, the Worcester County Planning Commission gave the said petition a favorable recommendation during its review on October 3, 2019; and

WHEREAS, subsequent to a public hearing held on January 21, 2020, following due notice and all procedures as required by §§ ZS 1-113 and 1-114 of the Zoning and Subdivision Control Article of the Code of Public Local Laws of Worcester County, Maryland, the County Commissioners made findings of fact and found that there is a mistake in the existing zoning of the petitioned area and also made findings of fact relative to the other criteria as required by law;

NOW, THEREFORE, BE IT RESOLVED by the County Commissioners of Worcester County that the land petitioned by M & G Route 50 Land, LLC, applicant, and Joseph E. Moore, applicant's attorney, and shown on Tax Map 20 as Parcels 47 and 318 is hereby reclassified from A-1 Agricultural District to C-2 General Commercial District.

BE IT FURTHER RESOLVED that the effective date of this Resolution shall be nunc pro tunc, January 21, 2020.

EXECUTED this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

ATTEST:

COUNTY COMMISSIONERS OF  
WORCESTER COUNTY, MARYLAND

\_\_\_\_\_  
Harold L. Higgins  
Chief Administrative Officer

\_\_\_\_\_  
Joseph M. Mitrecic, President

\_\_\_\_\_  
Theodore J. Elder, Vice President

\_\_\_\_\_  
Anthony W. Bertino, Jr.

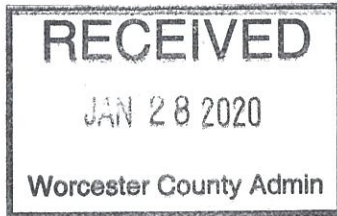
\_\_\_\_\_  
Madison J. Bunting, Jr.

\_\_\_\_\_  
James C. Church

\_\_\_\_\_  
Joshua C. Nordstrom

\_\_\_\_\_  
Diana Purnell

**DRAFT**



DEPARTMENT OF  
DEVELOPMENT REVIEW AND PERMITTING

**Worcester County**

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ZONING DIVISION  
BUILDING DIVISION  
DATA RESEARCH DIVISION

ADMINISTRATIVE DIVISION  
CUSTOMER SERVICE DIVISION  
TECHNICAL SERVICE DIVISION

14

## MEMORANDUM

TO: Harold L. Higgins, Chief Administrative Officer  
FROM: Edward A. Tudor, Director *EAT*  
DATE: January 27, 2020  
RE: 2020 Census Outreach

\*\*\*\*\*

Attached herewith you will find a memorandum from Kelly Henry of my staff, acting in her capacity as the 2020 Census Complete Count Coordinator, requesting permission to allow magnetic decals to be applied to all County vehicles in order to promote Census participation. I wholeheartedly agree with her request and recommend that the County Commissioners grant approval of same.

As always, Mrs. Henry and I will be available at your request to answer questions and provide any additional information.

cc: Kelly Henry, Technical Services Manager



DEPARTMENT OF  
DEVELOPMENT REVIEW AND PERMITTING

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ZONING DIVISION  
BUILDING DIVISION  
DATA RESEARCH DIVISION

ADMINISTRATIVE DIVISION  
CUSTOMER SERVICE DIVISION  
TECHNICAL SERVICES DIVISION

TO: Edward A. Tudor, Director  
FROM: Kelly L. Henry, Complete Count Coordinator  
DATE: January 24, 2020  
SUBJECT: Approval to Display "2020 Census Worcester" Magnetic Decal on County Vehicles and Census Logo on County Staff Email Stationary

\*\*\*\*\*

The Complete Count Committee has discussed several ways in which to increase public awareness regarding the importance of everyone being counted in the 2020 Census. In metropolitan areas, counties have utilized bus wrap advertisement. While this may work in urban areas, the Committee feels that bus wraps would not achieve a county-wide coverage. The Committee has approved a designed for a 5.5" x 8 "magnetic decal that would be placed on the rear of vehicles. A copy of the logo is shown below for your reference. The Committee is requesting that all government vehicles within each municipality, county and state within Worcester County, and service vehicles within Ocean Pines display the "2020 Census Worcester" decal. I would like to seek approval from the Commissioners to allow this magnetic decals to be placed on all county vehicles. According to Fleet Maintenance there are approximately 430 vehicles.

In addition, the Committee would like to seek approval to have the same logo added to County staff email stationary along with the two links to the federal and state census websites: [census.maryland.gov](http://census.maryland.gov) and [2020census.gov](http://2020census.gov).

As always I am available to discuss this matter in greater detail. Thank you for your time.



Magnetic Vehicle Decal



Email Stationary



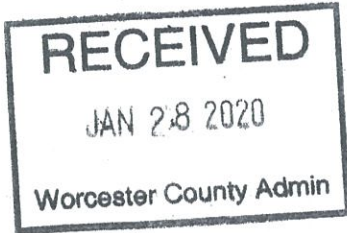


DEPARTMENT OF  
INFORMATION TECHNOLOGY

## Worcester County

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15



To: Harold Higgins, Chief Administrative Officer  
From: Brian Jones, IT Director   
Re: Recommendations and next steps for broadband planning  
Date: January 27, 2020

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As we discussed at last week's Commissioners meeting, the following are my recommendations for next steps related to CTC Technology & Energy's (CTC) draft broadband report dated December 31. (I have directed CTC to revise the report modestly in light of our discussions and new developments, and to deliver a final draft to us within the next two weeks.)

**First, I recommend we undertake an effort to better understand Bloosurf's coverage and capacity in the County.** As many of you noted during the Commissioners meeting, and as Worcester County residents frequently report to us, there are ongoing challenges with Bloosurf's coverage, and substantial parts of the County where service is not available—even though federal broadband coverage maps suggest that the entire County is served by Bloosurf. Further, we receive frequent reports that even where service is available, it is frequently unreliable and low bandwidth.

As CTC suggested, there are ways to test and verify these factors; I have asked CTC for a proposal to undertake such an effort. This kind of testing and report will enable us to understand whether Bloosurf is indeed providing the service it claims, or whether the County is in the untenable position of facing limitations with regard to grant opportunities<sup>1</sup> because of an existing provider that is not delivering the service it claims.

**Second, I recommend we undertake a 2020 request for information (RFI) process to identify one or more private partners that are interested in working with the County to seek both state and federal broadband funding to fill our broadband gaps.** CTC has identified a multi-year, multi-application grant strategy the County could undertake with a private partner once Bloosurf's

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protected status for much of Worcester County disappears—or in the event we discover through the testing that Bloosurf is not in compliance with its obligations.

This RFI could be released immediately after the results of the Bloosurf testing are available—thus enabling us to advise potential partners of the current situation. The goal of the RFI would be to identify entities willing to invest in the County, to build communications networks, and to apply for state and federal funding (over multiple years, if necessary). In addition, the private partner should be willing to undertake the bulk of the risk of the effort in exchange for County support, as well as grants to the partner from the state, the federal government, and potentially the County itself. As a result of the RFI process, the County will be in a position to negotiate the terms of a collaboration with a private partner, including for County support of state and federal funding bids.

**Third, I recommend the County continue its strong support of Choptank Electric Cooperative and engage extensively with Choptank to support its plans to deploy fiber-to-the-premises in Worcester County.** I note that Choptank may be the most viable potential partner for our broadband efforts; as a result, we should encourage Choptank to participate in our RFI process.

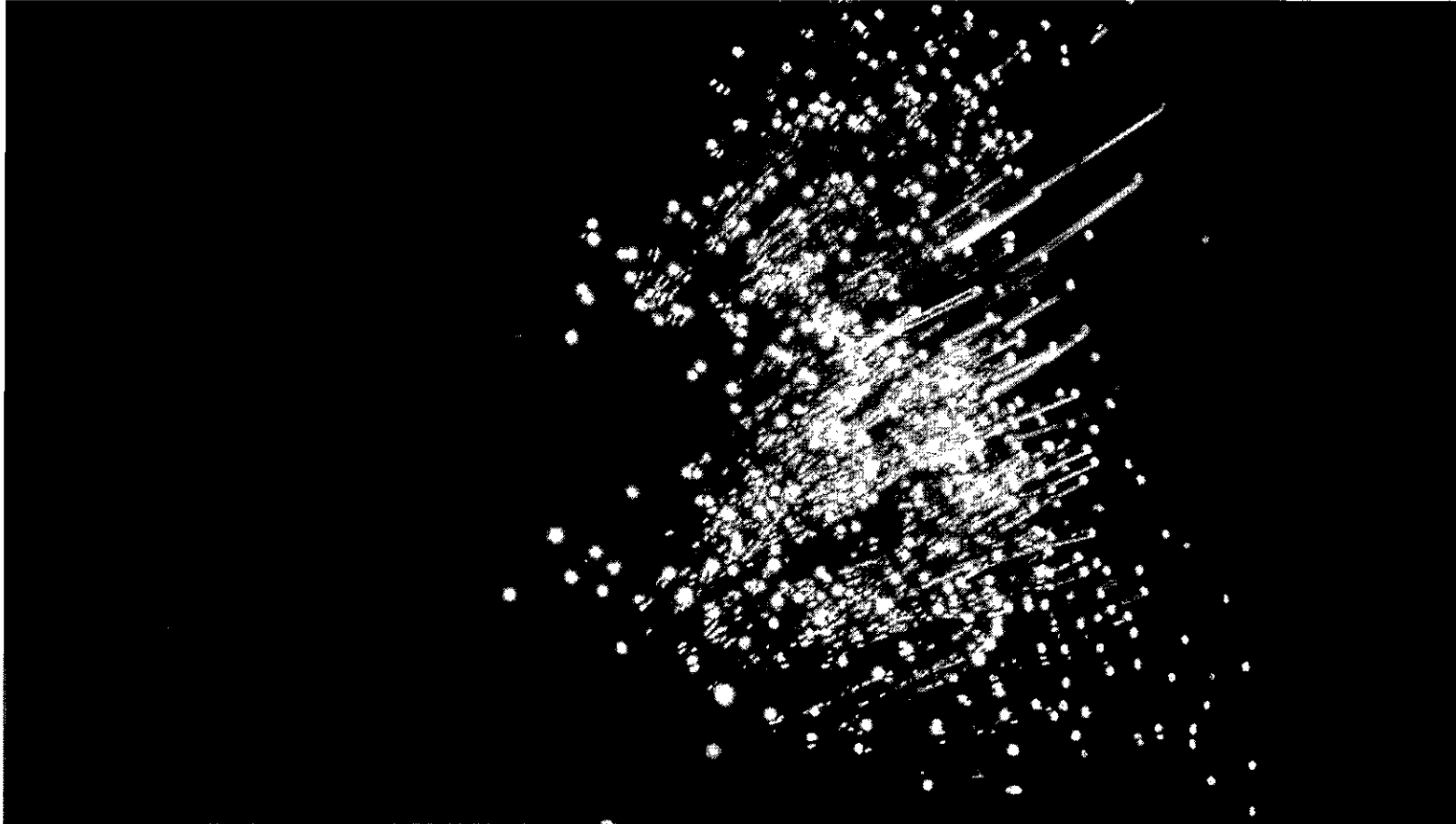
**Fourth, I recommend continued engagement with the State of Maryland Office of Rural Broadband, which has been a strong partner and supporter of the County through this process.** Every indication is that, as we go through the next steps, the state will continue to support and advise us. We are positioned to continue to apply for state grant funds to support our broadband planning efforts when those funds are made available next. Those grants for planning support are in addition to any potential grants for infrastructure that the state might make to our private partner.

I welcome any questions you may have.

<sup>1</sup> Bloosurf has received funding from federal grant and loan programs that effectively protects it from alternative provider applications in its claimed service areas under several federal grant programs. Bloosurf's service area covers the entire County. Once this protected status expires, however, these areas will open back up to applicants.

# **ctc technology & energy**

engineering & business consulting



## **Broadband Feasibility Study**

**Prepared for Worcester County, Maryland  
December 2019 | DRAFT**

**Columbia Telecommunications Corporation**

10613 Concord Street • Kensington, MD 20895 • Tel: 301-933-1488 • Fax: 301-933-3340 • [www.ctcnet.us](http://www.ctcnet.us)

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## **1 Executive Summary**

Commissioned in spring 2019 by the government of Worcester County, Maryland, this report reflects the County's ongoing efforts to ensure that all residents and businesses have access to high-speed, affordable broadband services.

As the County's consultant, CTC Technology & Energy (CTC) performed the following tasks at the County's direction:

- Conducted extensive desk and field surveys, and analyzed data and maps to identify served and unserved portions of the County
- Met with key public and private stakeholders to identify broadband needs
- Spoke with representatives of some internet service providers (ISP) operating in the County (or with potential interest to operate in the County) to learn what market forces or County support might lead them to invest in the County
- Prepared a high-level design and cost estimate for a fiber optic network deployment to fill the identified broadband gaps in the County
- Prepared a high-level design and cost estimate for a fixed wireless network deployment that might help fill broadband gaps in the County
- Analyzed a range of federal and state funding opportunities to identify potential sources of grants or loans (to the County or to ISPs) that might support the expansion of broadband services
- Developed a series of potential strategies the County could pursue to leverage federal and state funding to meet its broadband goals

### **1.1 Project Findings**

Residents of Worcester County have access to a mix of internet services, but the availability of robust broadband services for individual homes and businesses depends on location. For example, while Comcast and Mediacom provide residential wired service in the County's denser neighborhoods (e.g., Berlin, Pocomoke City, and Ocean City), neither provides service in other, sparsely populated areas that meets the definition of broadband adopted by the FCC and the

State of Maryland's Office of Rural Broadband (25 Mbps download and 3 Mbps upload, or "25/3").<sup>1</sup>

Because of the challenging economics of broadband deployment in rural areas, commercial ISPs likely will not invest in ubiquitous broadband infrastructure in currently unserved parts of the County absent some sort of financial support. State and federal funding programs may present the County and its potential partners with opportunities to fill some broadband gaps.

#### **1.1.1 "Unserved" homes and businesses are those not passed by broadband infrastructure**

Unserved areas are those where no infrastructure capable of delivering services that meets the federal definition of broadband "passes" along the public right-of-way adjacent to homes and businesses.<sup>2</sup> In practice, an unserved location is one where there is no cable or fiber plant in the right-of-way.

The availability of a passing to a home or business is the universally understood definition of what is served, both within the industry and among the state and federal government entities that fund broadband expansion<sup>3</sup> and regulate communications services. It is important to note, however, that a "passing" does not include the "service drop"—the portion of the network that connects the infrastructure at the curb to the home or business itself.

As a result, there is another category of locations within the County where homeowners may struggle to get broadband service—but those homes do not fit into the category of unserved (and thus are not included in the count of unserved premises). These are areas where broadband infrastructure passes homes or businesses (and thus the premises are considered served), but because the premises are set back far from the road, the cost to build the service drops to the users' premises is prohibitive.

Service to these homes or businesses is thus not a matter of the availability of infrastructure, but rather a matter of the affordability of drop construction—because many consumers, particularly those with very long driveways, will find the ISP's quoted cost of connection to be very high.<sup>4</sup> The County could choose to subsidize the cost of drop construction, but this is unfortunately an area

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<sup>1</sup> "2018 Broadband Deployment Report," FCC, Feb. 2, 2018, <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report> (accessed December 2019).

<sup>2</sup> The current federal and state benchmark is 25/3, although some federal grants consider 10/1 speed as being served.

<sup>3</sup> Such as through the state and federal programs discussed in Section 6, below.

<sup>4</sup> Some local franchise agreements include language that require the cable company to build drops of up to a certain length (say, 300 feet) at no cost to the customer; drops longer than that threshold may be priced at the ISP's discretion.

in which the County will not have a state or federal partner to solve that problem—because neither state nor federal grant funding applies to this challenging issue.

### 1.1.2 Broadband is not available to about 6,400 homes and businesses throughout the County

CTC's analysis indicates that about 6,400 homes and businesses in the County do not have access to internet service that meets the federal definition of broadband. Based on desk and field surveys of wireline infrastructure conducted by a CTC outside plant engineer, we determined that the County's unserved areas are the red highlighted portions of the map below (Figure 1). We did not include the southern portion of Assateague Island in our analysis; that land is shaded white in the map below.

Figure 1: Unserved Portions of Worcester County



### **1.1.3 The economics of rural broadband limit ISPs' interest in deploying broadband to unserved areas**

Unserved portions of Worcester County face the same challenges as other rural communities in terms of attracting broadband infrastructure investment. Nationwide, even in the most affluent rural and semi-rural areas—from the horse farms around Lexington, Kentucky, to the ski communities outside of Aspen and Telluride, Colorado, to the resort areas on the Chesapeake Bay—the economics simply do not exist for rural broadband deployment absent substantial government funding. The private sector will not build costly infrastructure to reach all homes and businesses in low-density areas simply because the potential return on investment is insufficient to justify the investment.

The same dynamics apply to virtually all areas of rural infrastructure development. In the case of broadband, the issues are starker because broadband in the United States is traditionally thought of as an area of private investment, rather than public investment. The challenging economics result from the lack of density of homes—and, in many cases, the fact that homes are located on large parcels of land; long driveways or setbacks from the road greatly increase the cost to deploy wired infrastructure to those homes.

### **1.1.4 If the County invests in new infrastructure, fiber offers a better return than fixed wireless, given total cost of ownership and technical benefits**

Based on engineering and cost-estimation for both a fiber-to-the-premises and a fixed wireless solution for unserved portions of Worcester County, we conclude that overall, fiber-to-the-premises represents a better broadband solution than fixed wireless for most unserved areas. Fiber-to-the-premises and fixed wireless have comparable 10-year costs per customer.<sup>5</sup> But over a longer period, the total cost of ownership for a fiber-to-the-premises network would be lower than for a fixed wireless solution.

#### ***1.1.4.1 Fiber-to-the-premises in the County's unserved areas would require a large capital investment but relatively low operating costs***

Constructing fiber infrastructure to unserved portions of the County would require a capital investment of approximately \$46.7 million to \$49.7 million, or \$6,500 per passing (outside plant infrastructure cost only). This estimate is based on conceptual-level engineering that considers a range of factors that affect deployment costs, from availability of utility poles to number of fiber route miles necessary to pass all unserved homes and businesses. Section 3 describes this cost estimate in more detail.

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<sup>5</sup> These estimates are based on a range of assumptions, which are described in Section 3 and Section 4.

***1.1.4.2 A best-case fixed wireless solution could serve 50 to 85 percent of the County's unserved homes and businesses—but would require high capital and operating costs, and would not be as capable as a fiber network***

As an alternative to deploying fiber-to-the-premises, the County could consider a fixed wireless network to deliver broadband services to unserved members of the community. CTC's engineers developed a model to assess the viability of that approach.

Our analysis found that a fixed wireless network could be used to serve a portion of the County's unserved homes and businesses—but it would have clear technical limitations relative to a fiber optic network and would not reach all unserved premises. In the best-case scenario, equipment mounted on 40 existing towers in the County could enable coverage of approximately 85 percent of the unserved premises; a more conservative coverage model indicates that about 50 percent of unserved premises could be served.

**1.1.5 State and federal broadband funding programs represent an important opportunity for the County**

State and federal funding sources represent an important element of large-scale broadband deployments for unserved areas. While these programs tend to have restrictions that affect their potential breadth of impact, our analysis is that a number of programs—including the state's recently announced rural broadband grant program, and the federal ReConnect and Rural Digital Opportunity Fund programs—could assist the County's efforts to reduce the number of unserved homes and businesses.

The federal ReConnect program represents the most significant congressional appropriation of broadband funding since the Recovery Act in 2009—with \$600 million allocated in 2019 and \$550 million available in 2020. The program awards loans, grants, or a combination of the two for last-mile connections in rural areas; it favors private sector applicants that demonstrate, experience in network operations, solid financials, and strong support from the local government in the area to be served. The second round of grant applications opens on January 31, 2020, and closes March 16, 2020.<sup>6</sup> A third round of funding for this program is anticipated in the next year.

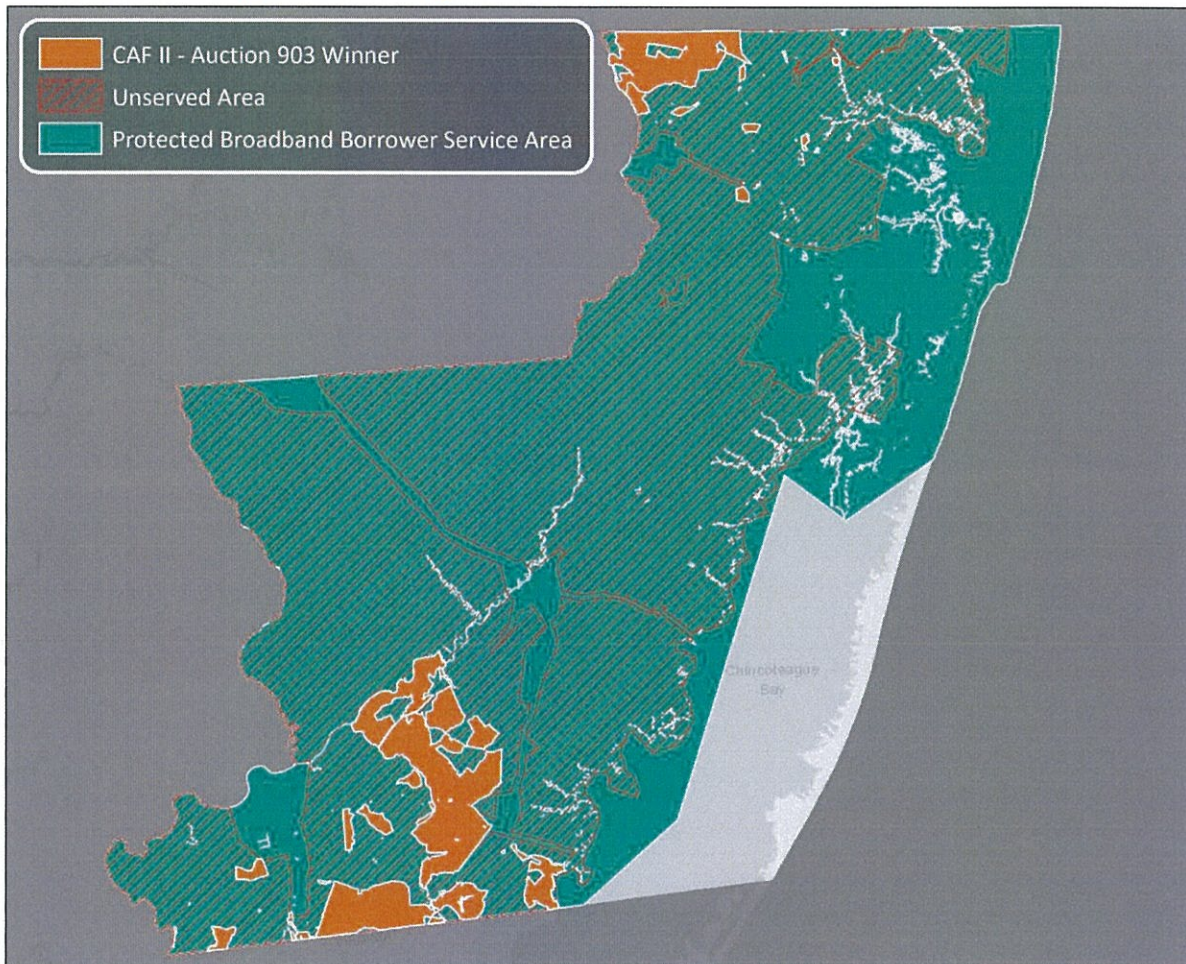
However, Congress created a significant barrier to ReConnect funding for the County when it wrote the legislation: It made ineligible any areas for which another grantee or loan recipient has received a previous broadband award. A wireless ISP, Bloosurf, was awarded \$3.2 million in USDA Broadband Initiatives Program (BIP) grant and loan funding in 2010 for service across the

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<sup>6</sup> "USDA to Make \$550 Million in Funding Available in 2020 to Deploy High-Speed Broadband Internet Infrastructure in Rural America," U.S. Department of Agriculture, News Release, Dec. 12, 2019, <https://www.usda.gov/media/press-releases/2019/12/12/usda-make-550-million-funding-available-2020-deploy-high-speed> (accessed December 13, 2019).

County,<sup>7</sup> and won the Connect America Fund II (CAF II) auction for additional portions of the County; those areas (shaded in green or orange, respectively, in the map below) are technically ineligible for ReConnect funding; we expect the protected status to expire in 2021, but the CAF II exclusion will continue.<sup>8</sup>

**Figure 2: Grant-Eligible and Ineligible Areas in Worcester County**



The Rural Digital Opportunity Fund builds on the success of the CAF Phase II auction, with a proposal to allocate an additional \$20.4 billion over the next decade in order to support the buildout of high-speed broadband networks in unserved and underserved areas of the country. The Rural Digital Opportunity Fund will exclude CAF-II funded areas, but current indications are that no other areas are “protected.” Instead the focus is on unserved areas in terms of the 25/3

<sup>7</sup> "Advancing Broadband," USDA BIP Awards Report, January 2011, <https://www.rd.usda.gov/files/reports/RBBReportV5ForWeb.pdf> (accessed December 2019).

<sup>8</sup> See Section 6 for more details regarding how the County might challenge Bloosurf's protected status in a ReConnect application.



benchmark. That leaves the green and cross-hatched areas in the map above potentially eligible for these grants. The Rural Digital Opportunity Fund represents a unique opportunity for which time is of the essence, as we expect the reverse auction will be held in 2020 for a decade's worth of funding.

The EDA opportunity does not exclude or protect any areas, and does not have any requirement for minimum speeds; it only focuses on broadband as an economic development tool—and therefore represents another good opportunity for the County with no protected or excluded areas.

The Governor's Office of Rural Broadband recently released the application for a broadband grant initiative that explicitly seeks to complement federal and local funding sources—an approach that could enable an entity partnering with the County to use the state's funding as a match for a federal ReConnect grant application, or to enable a lower bid in the Rural Digital Opportunity Fund reverse auction (in which the lowest bidder wins).

In contrast to the ReConnect protected areas, the state's grant program focuses exclusively on the broadband benchmark of 25/3, which leaves the entire cross-hatched area indicated as unserved in the map above as potentially eligible.

The Broadband Infrastructure Network Buildout Program will award grants of \$1 million to \$3 million from a total funding budget of at least \$9 million. While applicants needed to submit a non-binding letter of intent by December 23, 2019 (for applications due by February 21, 2020), we anticipate there will be state broadband funding again in 2021. Applicants for this opportunity would be the owners and deployers of the proposed broadband infrastructure.

#### **1.1.6 The fixed wireless provider Bloosurf's status as an RUS borrower represents a significant obstacle to some current federal funding opportunities, but not to state funding**

Bloosurf has received funding from federal grant and loan programs that effectively protects it from alternative provider applications in its claimed service areas under several federal grant programs. Bloosurf's service area covers the entire County. Once this protected status expires, however, these areas will open back up to applicants, presumably at the 25/3 benchmark.

This obstacle does not apply to the state programs, and does not present itself equally for all future federal grant programs; for example, the Rural Digital Opportunity Fund does not exclude the areas that are excluded under the ReConnect rules.

## **1.2 Recommendation: Develop a multi-year strategy to collaborate with partners to apply for state and federal broadband grants**

Our primary recommendation is that the County collaborate with private sector partners to apply for state and federal broadband grants. The state program is particularly promising because it does not place restrictions on geographic areas, other than being unserved by 25/3. We recommend pursuing state funding immediately—encouraging Comcast, ThinkBig, and any other well-qualified entities to apply.

Federal funding program also looks promising, particularly the Rural Digital Opportunity Fund. We believe this could be a good option and we encourage the County to work with Choptank and also potentially ThinkBig (as well as alternative bidders) if Choptank does not bid.

The ReConnect opportunity will be more difficult, given the protect status of much of the County's unserved areas. The County could undertake an effort in this round of ReConnect funding to contest the protected areas status, because anecdotal and other data, including the County's own experience, suggest that there is not anything resembling adequate service in these areas. We think that such a challenge will be difficult, because USDA will be conservative in its evaluation of competing data and claims—but it may be worth the County's effort to perform the necessary mapping, planning, and engineering. The County is left in limbo of not having a performing private entity, but not being able to find another solution with federal funds. A ReConnect challenge will bring attention to the fact that the federal government has given money to an entity that does not appear to be delivering on its promised broadband service—and the federal government is simultaneously saying that the County is not eligible for new funding.

Based on the dialogue CTC and the County have established with some service providers, we recommend the following approaches.

### **1.2.1 Engage with Choptank Electric Cooperative on these issues**

Choptank is an obvious choice for a partner in the County's broadband deployment efforts. Indeed, Choptank and electric cooperatives throughout the state have positioned themselves for this opportunity by asking the Maryland legislature to give them the authority to enter the broadband market.<sup>9</sup>

Because it is member-owned, Choptank presumably would not cherry-pick only certain unserved areas; it is responsible to all members within its service footprint in the County, not just to business opportunity in the way a for-profit ISP would be. Choptank also owns utility poles—the core structural asset needed for broadband deployment—throughout the County's unserved areas; those poles would be able to support fiber attachments and would dramatically lower

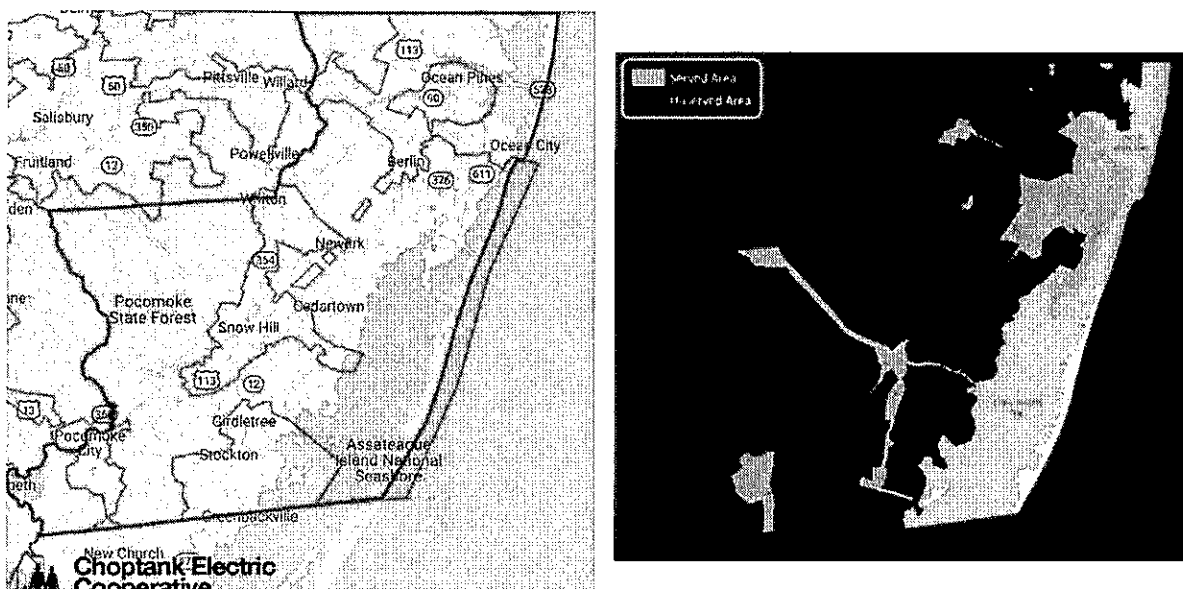
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<sup>9</sup> See, for example: "Support Choptank Fiber," <https://supportchoptankfiber.com/> (accessed December 2019).

Choptank's fiber construction costs. In addition, Choptank has the technical capability to construct aerial fiber and a proven ability to manage customer relationships.

While Choptank's current publicly published service area does not encompass all unserved areas of the County, there is substantial overlap that would enable Choptank to reach many of the unserved areas. The figures below show Choptank's self-reported electric coverage map, side by side with the County's unserved broadband areas.

**Figure 3: Choptank's Self-Reported Electric Service Area Compared to Unserved Portions of the County<sup>10</sup>**



We expect electric cooperatives such as Choptank to benefit from the FCC's Rural Digital Opportunity Fund, in particular, because of its ownership of poles in unserved areas. Choptank would have the lowest cost to build of any entity other than Verizon, which would be a competitive advantage if it were to bid on the FCC's planned reverse auction for the Rural Digital Opportunity Fund (in which the lowest bidder wins).

What's more, Choptank could also apply for state and ReConnect grants, in addition to Rural Digital Opportunity Fund funding. If Choptank were to miss the Rural Digital Opportunity Fund application window, it would still be eligible to apply for later rounds of ReConnect and state funding—but optimally, Choptank would secure funding from all of those sources.

<sup>10</sup> Areas shaded darker are service areas for Choptank. Source: <https://choptank.maps.sienatech.com/> accessed 12/15/2019.

### **1.2.2 Partner with ThinkBig on a state broadband grant application and potentially support a ReConnect grant application**

ThinkBig Networks could also be a strong partner for state and federal grant applications to construct fiber to serve the County's unserved areas. The company has indicated preliminary but not concrete interest.

ThinkBig will have a higher cost to build than Choptank would have, because it does not own the utility poles. But it would potentially be competitive for state grant funding (in partnership with the County) or federal ReConnect funding (See Section 2.3 and Section 6 regarding potential barriers to a ReConnect application.) And if Choptank does not bid on the Rural Digital Opportunity Fund, ThinkBig might be a competitor in the reverse auction; if ThinkBig can successfully secure a state grant, ReConnect funding, or support from the County, it could bid lower for Rural Digital Opportunity Fund funding and potentially position itself to win.

We recommend that the County explore a partnership with ThinkBig on a state broadband grant application, with the condition that if it receives funding, the company will seek to apply for a federal ReConnect grant using the state funds as part of its required matching contribution. Unless ThinkBig already submitted letters of intent for the current state grants, this strategy should be oriented toward expected future cycles of state grants. If ThinkBig were awarded state broadband funding, it could use those funds (and any County contribution to that program's match requirements) as its match for the federal application.

### **1.2.3 Encourage Comcast to apply for a state broadband grant**

As a cable provider with a presence in the denser areas of the County (and current plans to expand in Ocean Pines),<sup>11</sup> Comcast has infrastructure in the County that could enable it to expand into unserved areas with relatively lower costs per passings than other wireline providers. (See Section 3.6 for our sample cost estimate.)

Like ThinkBig, Comcast does not own utility poles so it would not be the most competitive Rural Digital Opportunity Fund bidder—but if Choptank does not bid, Comcast could be competitive. That said, we are unable to analyze the Comcast opportunity in much detail because the company has not given us any concrete sense of their plans with regard to the Rural Digital Opportunity Fund. Representatives have told us that the company does not plan to submit applications for ReConnect anywhere in the country; this may also be the case for the Rural Digital Opportunity Fund, but the company's intent is unclear.

CTC and the County approached Comcast to explore the potential to build to unserved areas under the terms of the state's grant program. As of this writing, we have not received concrete

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<sup>11</sup> Greg Ellison, "Comcast brings service competition to Ocean Pines," Bayside Gazette, Sept. 12, 2019, <https://baysideoc.com/comcast-brings-service-competition-to-ocean-pines/> (accessed December 2019).



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CHIEF ADMINISTRATIVE OFFICER  
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OFFICE OF THE  
COUNTY COMMISSIONERS

**Worcester County**

GOVERNMENT CENTER  
ONE WEST MARKET STREET • ROOM 1103

SNOW HILL, MARYLAND

21863-1195

January 29, 2020

TO: Worcester County Commissioners  
FROM: Harold L. Higgins, Chief Administrative Officer *HL*  
SUBJECT: Ocean City - West Ocean City EMS Funding

\*\*\*\*\*

At the request of Ocean City Mayor Rick Meehan in the attached email dated January 29, 2021, and with President Mitrecic's approval, I have scheduled Mayor Meehan to address you at 10:30 am during your meeting on February 4, 2020 as a follow up to his November 4, 2019 letter to President Purnell regarding West Ocean City Emergency Medical Services (EMS) funding to the Town of Ocean City.

Please be advised that Commissioner President Joe Mitrecic, County Treasurer Phil Thompson and I met with Mayor Meehan, Ocean City Manager Doug Miller, Ocean City Budget Officer Jenny Knapp, and the command staff of the Ocean City Fire Department earlier this month. The purpose of the meeting was to address the issue of funding for Fire and EMS services (primarily EMS) to the West Ocean City Service Area. Ocean City has advised that the total revenue collected for services to West Ocean City are not sufficient to cover their expenses. For calendar year 2018 the City calculates a deficit of \$395,089 absorbed by the taxpayers of Ocean City for services in West Ocean City. In response to an ever-increasing demand in West Ocean City, Paramedic Unit 7 has been established. According to Ocean City, eighteen full time equivalents will need to be hired to fully staff this unit. In accordance with the County's current funding formula, we will contribute an additional \$144,000 to the Town of Ocean City for this proposed increase in staff. Mayor Meehan has indicated that the current shortfall for services in West Ocean City is estimated at \$550,000. He further advised that full-time staffing of Station 5 on Keyser Point Road in West Ocean City would cost the Town of Ocean City \$1.6 million annually. In his November 4 letter, Mayor Meehan has suggested four potential solutions to address this issue.

Mayor Meehan is seeking an answer to his request for additional funding to address this shortfall now and in the future. Given the countywide impact of the EMS funding issue, I have advised Mayor Meehan that we plan to discuss this matter with the Fire Chiefs Committee and during FY21 budget deliberations, but that I was unable to give him an answer at this time.

**From:** Richard Meehan <[RMeehan@oceancitymd.gov](mailto:RMeehan@oceancitymd.gov)>  
**Sent:** Wednesday, January 29, 2020 1:31 PM  
**To:** Joseph Mitrecic <[jmitrecic@co.worcester.md.us](mailto:jmitrecic@co.worcester.md.us)>  
**Cc:** Harold Higgins <[hhiggins@co.worcester.md.us](mailto:hhiggins@co.worcester.md.us)>; Douglas R. Miller <[DMiller@oceancitymd.gov](mailto:DMiller@oceancitymd.gov)>;  
Lloyd Martin <[LMartin@oceancitymd.gov](mailto:LMartin@oceancitymd.gov)>  
**Subject:** EMS Service to West Ocean City

President Mitrecic,

As a follow up to my letter, dated 11/4/19 addressed to President Purnell, and the meeting held in Ocean City on 1/17/20, I would request that we be placed on the Open Session Agenda of the County Commissioners on 2/4/20.

Respectfully,

Rick Meehan  
Mayor  
Ocean City, MD 21842





# TOWN OF OCEAN CITY

*The White Marlin Capital of the World*

November 4, 2019

Worcester County Government Center  
President Diana Purnell  
1 W. Market St. Room 1103  
Snow Hill, MD 21863

Dear President Purnell,

The Town of Ocean City's commitment to provide Fire and EMS Service to the West Ocean City Service Area was established when these services were provided by the Ocean City Volunteer Fire Company. Today all EMS Service is no longer provided by volunteers but by paid members of the Ocean City Fire Company. This change has resulted in a number of issues that need to be addressed.

Out of Crew Status, or the number of times there are no available crews to respond to the next incoming call is a serious matter for any responding ambulance company. Continued development in West Ocean City and the subsequent increase in the number of medical responses required of Ocean City's ambulance crews to West Ocean City has led to an unacceptable increase in the Town's Out of Crew Status occurrences.

In calendar year 2018, Town of Ocean City paramedic units responded to 828 calls for service in West Ocean City, which represents 13.35% of the total number of medical responses made by Ocean City in calendar year 2018. The cost to provide that service was \$1,049,191. Revenue collected from West Ocean City patients totaled \$200,382. Grant revenue from the County totaled \$453,720 for the 520 credit runs and the 308 non-transports in the West Ocean City response area. Total revenue collected for service to West Ocean City, including the county grants for the West Ocean City service area, totaled \$654,012, leaving a deficit of \$395,089 for the taxpayers of Ocean City to cover. We would respectfully request to be reimbursed for this amount.

The Town has recently approved an additional crew on certain days of the week to minimize the Out of Crew Status occurrences in the off-season at a cost of \$160,000. A portion of that cost will also be directly attributable to medical responses to the West Ocean City service area. Our Paramedic staff has requested an additional shift of employees year-round specifically to minimize the number of Out of Crew Status occurrences. Adding another shift would add eighteen additional full-time staff, which would increase the Town's budget by \$1.6 million for salary and benefits, and would increase the cost for service to the West Ocean area by an additional \$213,600.

**MAYOR**  
RICHARD W. MEEHAN

**CITY COUNCIL**

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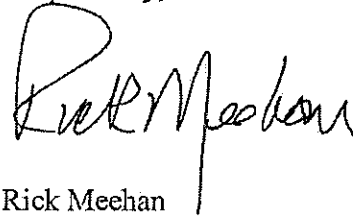
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There are four potential solutions to this dilemma:

1. Establishment of medical response districts throughout the County and development of a fee structure to support the costs of response to each area, separate from the County property tax bill.
2. Worcester County would reimburse Ocean City for the staffing and operational costs at the West Ocean City station (Station 5) on a year-round basis. Stationing three employees per day for 24 hours per day, 365 days per year would cost \$1.2 million in salary and benefits. In addition, the Town would require funding for an additional medic unit at an estimated cost of \$400,000. As Station 5 is not currently set up to handle 24 hour per day staffing, modifications would also need to be made to the station.
3. Direct payment to the Town on an annual basis for the deficit attributable to service to West Ocean City. This year, that payment would be \$395,089 over and above the County grants specifically for service to West Ocean City.
4. Revision of the grant amounts for both credit and non-credit runs outside of the Town of Ocean City corporate limits. Increasing the grant for credit runs outside city limits from \$760 per run to \$1,458 per run and for non-credit runs from \$190 to \$364 would cover the deficit experienced in the current fiscal year. These rates should be reviewed on an annual basis to determine if they are still adequately covering the cost of response.

I think we all would agree that providing EMS Service to West Ocean City is essential to the health, safety and welfare of Worcester County residents and visitors. This issue is not just going to go away and it is imperative that the Town and County officials meet and work together to resolve this issue no later than January 31, 2020. If the Town is going to continue to provide medical response to the West Ocean City service area there must be a funding source to cover the total cost of this service.

Respectfully,



Rick Meehan  
Mayor

cc: Worcester County Commissioners  
Worcester County Administrator Harold Higgins  
Ocean City Mayor and City Council  
City Manager Doug Miller