

BWB Testimony - SUPPORT SB414.pdf

Uploaded by: Aiosa, Jenn

Position: FAV



SB 414 – Climate Solutions Now Act – SUPPORT

Dear Chairman Pinsky and Members of the EHEA Committee:

Blue Water Baltimore is the watershed-based nonprofit focused on improving water quality and community resilience within Baltimore City and Baltimore County, and home to the Baltimore Harbor Waterkeeper. **We respectfully request your support of SB 414 – Climate Solutions Now.**

The Mid-Atlantic region is already experiencing the impacts of changing climate. In 2017, Blue Water Baltimore worked with researchers at the US Geological Survey and the Cary Institute of Ecosystems Studies to evaluate 20 years of data in the Gwynns Falls watershed in Baltimore County and City. This evaluation showed that rainfall has demonstrably increased and has impacted the health of this watershed.¹ The Baltimore region is increasingly experiencing “flashy” storm events that lead to local flooding, property damage, and in Baltimore City, the discharge of untreated sewage into homes and businesses due to old, leaky infrastructure.

Many communities in Baltimore are also subjected to increasing summer temperatures, called the “urban heat island” effect, because extensive pavement and few trees exacerbate heat. In fact, in 2018, the National Oceanic and Atmospheric Administration (NOAA) measured summer temperatures across City neighborhoods at the same times in different locations and found that summer temperatures on a single day could be as much as 16° hotter in neighborhoods with fewer trees and more impervious cover². Many of these neighborhoods have higher populations of Black and Brown residents, higher rates of poverty, and higher incidences of poor health outcomes including respiratory ailments like asthma.

Senate Bill 414 would help reverse these disturbing trends by:

- 1) Committing the state to aggressive, but necessary, reductions in greenhouse gas emissions that trap heat and pollutants in our cities and towns;
- 2) Mandating that a percentage of all future climate spending go to communities already overburdened by the impacts of climate change, like urban heat and flooding; and
- 3) Prioritizing climate mitigation efforts including the planting of some 5 million trees, with a minimum target for trees in our most impacted urban neighborhoods.

The time for action on climate is NOW; the costs of doing nothing are already too high for many communities to bear. As such, Blue Water Baltimore, on behalf of our thousands of members and supporters, respectfully urges a Favorable Report on SB 414. Thank you.

Jennifer Aiosa
Executive Director
Blue Water Baltimore
jaiosa@bluewaterbaltimore.org

¹ Factors affecting long-term trends in surface-water quality in the Gwynns Falls watershed, Baltimore City and County, Maryland, 1998–2016. <https://pubs.er.usgs.gov/publication/ofr20181038>

² <https://www.noaa.gov/news/hot-days-in-city-it-s-all-about-location>

SB414.PDF

Uploaded by: allen, gary

Position: FAV

124 South Street #3
Annapolis, MD 21401

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January 28, 2021

SUPPORT SB 0414 Climate Solutions Now Act of 2021

Dear Mr. Chair and members of the Education, Health, and Environmental Affairs Committee,

GARY G. ALLEN
President

ERIC SPRAGUE
Vice President for
Development

SANDRA SPARKS
Vice President for
Communications

DAWN BALINSKI
Treasurer

Secretary

Directors
JIM BARDSLEY
PETER BECKER
GLENN FERENSCHAK
DAVID KEANE
WAYNE LUCAS
JOLI A. MCCATHRAN
BILL REES
DON VAN HASSENT

The Bill before you is a defining set of actions to address and mitigate the relentless rise in CO2 emissions and the accompanying changes to long term weather patterns called climate. These effects can be addressed through near-term mitigation actions and through long term adaptive behavior. Taken together and looked at strategically, they form the basis for the bill as drafted. While not perfect and not sufficient without accompanying actions in other states. This bill is a bold, ambitious and essential set of actions to strengthen and prioritize state programs to address CO2 reduction.

We are particularly mindful of the role trees can play in the work. The benefits of tree planting for water and air quality are widely known and supported. Trees are no less important as a natural carbon sink and properly sited and managed through the practice of good silva culture to resist the many emerging threats to their health and growth offer a proven, affordable and essential component to our state's climate strategy. Planting and managing millions more trees will provide a steady stream of economic and health benefits for Maryland families both now and in the future. We would be pleased to provide greater detail on appropriate management and maintenance strategies based on our work across the state.

We strongly support a favorable report on the "Climate Solutions Now Act of 2021". Maryland needs to pass legislation to plant more trees, manage them for health and growth, combat climate change, and mitigate the growing impact of climate change.

A handwritten signature in blue ink, appearing to read "Gary G. Allen".

Gary G. Allen
President, Maryland Forestry Foundation
marylandforestryfoundation.org

SB0414 - Balt Sustain Comm.pdf

Uploaded by: Avins, Miriam

Position: FAV

BALTIMORE COMMISSION ON SUSTAINABILITY
People ♦ Planet ♦ Prosperity

January 26, 2021

Senator and Committee Chair Pinsky
Members of the Senate Education, Health, and Environmental Affairs Committee

RE: Support for **Senate Bill 0414: Climate Solutions Now Act of 2021**

Dear Dear Chairman Pinsky and Members of the Committee:

We are writing in support of Senate Bill 0414, the Climate Solutions Now Act.

The Baltimore Commission on Sustainability is a body appointed by the Mayor to oversee the creation and implementation of the Baltimore Sustainability Plan. The 2019 Baltimore Sustainability Plan addresses a wide range of social, economic, and environmental goals for the City, and it does so through an equity lens.

The Baltimore Commission on Sustainability has a strong interest in the success of SB0414, which would help achieve numerous goals of the 2019 Sustainability Commission, including those related to Greenhouse Gas Emissions, Trees & Forests, and Local Economy. We recognize that climate change disproportionately impacts many low-wealth communities and communities of color, including impacts to health, local environment, and income. This bill will directly assist these communities by reducing harmful carbon emissions in order to improve public health; ensuring that a portion of state climate funds are spent on environmental justice communities; helping to create jobs at all levels; and increasing tree canopy in underserved urban communities.

We urge the Committee to support Senate Bill 0414.

Sincerely,

Miriam Avins
Mia Blom
Co-chairs, Commission on Sustainability

CSNtestiSB414.pdf

Uploaded by: Bailey, Joyce

Position: FAV

Testimony for SB414 - “Climate Solutions Now”

Committee: Education, Health & Environmental Affairs

Organization: Montgomery Countryside Alliance

Person Submitting: Joyce Bailey, Education Chair

Position: Favorable

Hearing Date: January 28, 2021

Dear Mr. Chairman and Committee Members,

Thank you for allowing our testimony today in support of SB414, the Climate Solutions Now bill. The Montgomery Countryside Alliance was founded to promote sound economic, land-use and transportation policies that preserve the natural environment, open spaces and rural lands in Montgomery Country’s Agricultural Reserve for the benefit of all Washington Metropolitan area residents.

We strongly urge a favorable report on this legislation. The planet is facing a climate crisis which is affecting agriculture, communities and ecosystems both locally and throughout the world. The response from Maryland, the United States and other wealthy nations must be immediate and ambitious. And, importantly, we must ensure that those communities disproportionately burdened by the cumulative impact of environmental pollution and other hazards be an integral part of shaping our solutions.

Important reasons to support the Climate Solutions Now bill include:

Maryland Commission on Environmental Justice and Sustainable Communities: The bill establishes a 20 member commission, two of whom must be representatives of disproportionately affected communities. The Commission will develop specific criteria for identifying communities disproportionately affected by climate change, develop specific recommendations to address environmental justice concerns, reduce greenhouse gasses and co-pollutants, build climate equity and resilience within disproportionately affected communities, and set a percentage of state funds to be spent for the benefit of those disproportionately affected communities.

Job Creation: The bill encourages new opportunities for employment in greenhouse gas reduction technologies, alternative energy supply and energy conservation, particularly in areas experiencing high unemployment or high rates of poverty. The bill will lead to creation of jobs, including in the energy, building, working lands, and transportation sector.

Worker Justice: The bill requires a new Work Group to convene with representatives from labor, legislators, the Secretary of Labor's office, climate groups, and renewable energy companies to make policy recommendations and develop strategies for how to best serve fossil fuel workers in Maryland and create transitions to jobs created by climate change.

For these reasons we urge you to vote favorably for SB0414.

CBall_2021 - SB 414 Climate Solutions Now Act of 2

Uploaded by: Ball, Calvin

Position: FAV



HOWARD COUNTY OFFICE OF COUNTY EXECUTIVE

3430 Courthouse Drive ■ Ellicott City, Maryland 21043 ■ 410-313-2013 Voice/Relay

Calvin Ball
Howard County Executive
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January 28, 2020

Senator Paul G. Pinsky, Chair
Education, Health and Environmental Affairs Committee
Miller Senate Office Building, 2 West
Annapolis, MD 21041

Re: Testimony **IN SUPPORT** of SB 414: Climate Solutions Now Act of 2021

Dear Chair Pinsky and Members of the Committee,

I commend you for your leadership in the fight for creating a clean, resilient and sustainable environment the introduction of SB 414, the Climate Solutions Now Act of 2021.

Two years ago, my Administration committed to the “*We Are Still In*” initiative. In doing so, we declared that we support climate actions proposed by the 2015 Paris Climate Agreement, of which the Biden Administration recently rejoined. Howard County remains committed to even more ambitious targets for decreasing emissions and further protecting our environment:

- Howard County will reduce greenhouse gas emissions of County government operations 45 percent below 2010 levels by the year 2030 with the goal of reaching zero emissions by 2050.
- By 2024, Howard County will receive 20 percent of its power for local government operations from renewable sources. We have begun implementing a power purchase agreement that will surpass this goal – by getting nearly 30% of our power from solar arrays built on Howard County government property and elsewhere throughout the county.
- By 2024, we aim reduce petroleum fuel consumption in its fleet by 20 percent.
- By 2024, we will reduce energy use in County facilities by 25 percent, well beyond the required 15 percent reduction. This effort will make Howard County a regional leader and the first to exceed state requirements.

Since taking office, my Administration proposed the strongest forest conservation law in the State to mitigate the loss of natural lands. We planted more than 50,000 trees through a \$1 million National Fish and Wildlife Federation grant and preserved a 5-acre, state-designated targeted ecological area in Savage as open space. We broke ground on four new garden plots within the Long Reach Garden, the first community garden expansion in over a decade. Howard County also added 58 hybrid vehicles to the central fleet to help meet its fuel consumption goals.



HOWARD COUNTY OFFICE OF COUNTY EXECUTIVE

3430 Courthouse Drive ■ Ellicott City, Maryland 21043 ■ 410-313-2013 Voice/Relay

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My Administration will continue to do our part to fight climate change and now, the United States will once again be a global leader e front as world leaders be reentering the Paris Agreement. However, our efforts will fall short unless the state also takes an active role. This bill is an ambitious and necessary commitment to engage at all levels in the fight against climate change.

Thank you for your consideration of this critical piece of legislation and for your continued commitment to help lead the fight for climate change and environmental preservation resiliency. I urge a favorable committee report of SB 414.

All the Best,

A handwritten signature in blue ink, appearing to read 'Calvin Ball', is written over a horizontal line.

Calvin Ball
Howard County Executive

Climate Solutions Now Testimony.pdf

Uploaded by: Barrett, Reese

Position: FAV



MaryPIRG Student Climate Action Coalition
, 2021

Testimony in SUPPORT of SB 414 – *Climate Solutions Now Act*

Dear Chairman Pinsky and Members of the Committee,

MaryPIRG Student Climate Action Coalition supports SB414, the Climate Solutions Now Act of 2021.

Globally, we are at a critical choice point that will determine the course of our future forever. Climate change is already here, and we are the last generation that will be able to course correct towards a livable future for all. However, we have the tools, resources and knowledge to take action right now.

This bill ensures Maryland will be part of the new green future by:

- Ensuring Maryland is in line with the current climate science by committing us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045
- Restructuring our approach to climate justice by mandating that a percentage of all future climate spending must go to “disadvantaged” communities in terms of climate change, a term to be defined by experts and stakeholders
- Ensuring that labor voices are represented in our planning process, and that jobs benefit those who need them most
- Taking several immediate steps to reduce emissions, such as planting 5 million native trees by 2030, electrifying state vehicles, requiring several net neutral buildings and mandating energy efficiency increases

MSCAC supports this legislation because we represent students and youth. It is absolutely imperative that the climate crisis is taken seriously and policy is enacted to ensure that we mitigate and adapt to these challenges in a just way. Our students want a livable future, and it is the responsibility of policymakers to look at the facts and leave behind a better world for us, their children.

International experts have urged action on climate with increasing fervor in recent years for good reason: the consequences of staying the course will be highly dangerous. Here in Maryland we have a lot at stake, with nuisance flooding, high heat days and storm surges already regular occurrences. We have an opportunity to listen to scientists now while signaling to the nation that Maryland is ready to embrace the new green economy. There is no more time to delay on meaningful climate action.

We encourage a FAVORABLE report for this essential legislation.

Signed,
Reese Barrett
Campaign Coordinator

MaryPIRG Student Climate Action Coalition
mscacoalition@gmail.com

SB0414-FAV-DTMG-1-28-21.pdf

Uploaded by: Bartlett, Olivia

Position: FAV



Olivia Bartlett, Co-Lead, DoTheMostGood Maryland Team

Committee: Education, Health, and Environmental Affairs

Testimony on: SB0414 – Climate Solutions Now Act

Position: Favorable

Hearing Date: January 28, 2021

Bill Contact: Senator Paul Pinsky

DoTheMostGood (DTMG) is a progressive grass-roots organization with more than 2500 members who live in a wide range of communities in Montgomery and Frederick Counties, from Bethesda near the DC line north to Frederick and from Poolesville east to Silver Spring and Olney. DTMG supports legislation and activities that keep all the members of our communities healthy and safe in a clean environment and that address equity for all residents in our communities. DTMG strongly supports SB0414 because it is a comprehensive approach to reduce the greenhouse gas (GHG) emissions that drive climate change, to move Maryland towards a renewable energy future with good green jobs, and to bring Maryland's plans for addressing the existential threat of climate change into line with the scientific recommendations of the most recent Intergovernmental Panel on Climate Change.

Climate change is already here. Maryland already has nuisance flooding, high heat days, and storm surges on a regular basis. International experts have urged action on climate with increasing urgency in recent years for good reason: the consequences of not acting now will be very dangerous for our children and grandchildren.

In addition, a recent Harvard study found that a small increase in air pollutants from fossil fuel combustion causes a significant increase in the likelihood that someone will die from COVID-19. As Maryland recovers from the coronavirus and its associated recession, passage of SB0414 will both stimulate our economy and improve our air quality.

SB0414 will update Maryland's GHG goals to 60% reduction by 2030 and net zero emissions by 2045, and mandate that MDE cannot use highway widening or unproven carbon capture and storage technologies when planning how to achieve these goals. This will bring Maryland into line with the most recent IGPPC recommendations. SB0414 also requires the state to take several other immediate steps to reduce emissions, including planting 5 million native trees by 2030, increasing the incentive for farmers who enroll in the Conservation Reserve Enhancement Program, transitioning state light vehicle and bus fleets to zero-emission vehicles, requiring new commercial buildings and schools to be net neutral or solar ready, and mandating increases in energy efficiency in commercial and residential buildings. SB0414 also requires better monitoring of methane leakage from landfills, SB0414 will require MDE to calculate the social cost of carbon emissions, which is a big step toward understanding the real and total costs of GHG emissions.

Many studies have shown that low-income and minority communities disproportionately bear the consequences of air pollution and climate change. SB0414 addresses this problem with a strong equity and environmental justice components that will:

- Require the Maryland Commission on Environmental Justice and Sustainable Communities to identify communities disproportionately impacted by the climate crisis.
- Restructure Maryland's approach to climate justice by mandating that a percentage of all future climate spending go to disproportionately affected communities.
- Ensure that labor voices are represented in the planning process, and that jobs benefit those who need them most.
- Exempt from personal property tax community solar projects on rooftops, parking lots, or brownfields that primarily benefit low-income households.
- Require that 10% of the 5 million trees to be planted are in urban areas that have been historically redlined or are economically disadvantaged.
- Create a grant program through the Chesapeake Bay Trust to fund community groups planting trees in underserved urban areas.

Importantly, SB0414 establishes adequate and sound funding mechanisms for the proposed programs. Up to \$20 million of funds in excess of \$50 million in Strategic Energy Investment Fund (SEIF) will be spent to implement the proposed programs. SB0414 does not propose to take away from any of the existing SEIF funding percentages; only funds that are above and beyond the usual annual budget for SEIF will be used for these programs. In addition, every year between 2022 and 2030, \$15 million from the Bay Restoration Fund will be used to enhance existing Department of Natural Resources and Department of Agriculture programs and create a new Urban Tree Planting program. As one of the most cost-effective practices to reduce water pollution, tree plantings are a worthy application of Bay Restoration Funds remaining following the State's completion of upgrades at major wastewater treatment plants.

In summary, SB0414 is a comprehensive approach that will create jobs, save lives, and reduce our contribution to the climate crisis in ways that address equity and environmental justice. Therefore, DTMG strongly supports SB0414 and urges a **FAVORABLE** report on this bill.

Respectfully submitted,

Olivia Bartlett
Co-lead, DoTheMostGood Maryland Team
oliviabartlett@verizon.net
240-751-5599

Climate Solution Now Act Testimony - Rock Creek Co

Uploaded by: Boland, John

Position: FAV

January 28, 2021

Testimony in SUPPORT of Senate Bill 414: Climate Solutions Now Act

Dear Chairman Pinsky and Members of the Committee:

Rock Creek Conservancy expresses its strong support for SB 414: Climate Solutions Now Act and thanks Senator Pinsky for his leadership on this environmental community priority legislation.

Rock Creek Conservancy supports the testimony submitted by Maryland League of Conservation Voters which establishes and applauds the milestones of the Act. Such milestone goals include:

1. Increasing Maryland's greenhouse gas reduction mandate to 60% by 2030 and net zero by 2045;
2. Charging the Commission on Environmental Justice and Sustainable Communities with determining what percent of Maryland's climate funding must be spent in overburdened, underserved communities that are disproportionately impacted by climate change emissions;
3. Planting 5 million trees, including 500,000 trees in underserved, urban communities;
4. Prohibiting highway widening and unproven carbon capture and storage technology as emissions reduction pathways in our state climate planning;

The Conservancy wants to emphasize the importance of tree canopy coverage as a tool to mitigate the impacts of climate change. Developed canopies help to slow both the infiltration of rainwater into ground systems and impervious surface runoff. As we have witnessed increasingly frequently in recent years, storms that hit the Rock Creek Watershed create flood events that impact roads and further erode protective banks. Just this past September 10th, we saw several water rescues on Beach Drive due to flooding from a major precipitation event.

In tandem with these goals, the Act will also further the social justice goals of climate resiliency through the following guiding principles:

1. Reduce harmful carbon emissions in order to improve public health;
2. Ensure a portion of state climate funds are spent on environmental justice communities;
3. Help create jobs at all levels;
4. Invest in tree-planting, focusing on underserved urban communities

Canopy coverage is also an environmental justice issue. Canopy coverage has a mitigative impact on urban heat island effect; during the summer months, urban areas often experience significantly higher average temperatures than geographically similar areas with higher tree

canopy coverage. As heat waves become more frequent and more intense, increasing canopy coverage helps protect urban populations from the dangers of extreme heat. There are significant correlations between low-income communities in highly urbanized areas and heat-related public health concerns, making canopy coverage a tool to address the overarching disparity in the severity of climate impacts across demographic groups and increase community resilience.

Rock Creek Conservancy is committed to restoring the Rock Creek watershed in ways that promote climate resilience and equity of access to ecosystem services. The Climate Solutions Now Act would be a major tool in that effort.

testimony - Google Docs.pdf

Uploaded by: Bush, Emma

Position: FAV

January 28, 2021

Testimony in SUPPORT of SB 414 – *Climate Solutions Now Act*

Dear Chairman Pinsky and Members of the Committee,

I support SB414, the Climate Solutions Now Act of 2021.

This bill ensures Maryland will be part of the new green future by:

- Ensuring Maryland is in line with the current climate science by committing us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045
- Restructuring our approach to climate justice by mandating that a percentage of all future climate spending must go to “disadvantaged” communities in terms of climate change, a term to be defined by experts and stakeholders
- Ensuring that labor voices are represented in our planning process, and that jobs benefit those who need them most
- Taking several immediate steps to reduce emissions, such as planting 5 million native trees by 2030, electrifying state vehicles, requiring several net neutral buildings and mandating energy efficiency increases

As a 16-year-old, I have grown up with the knowledge that my future is threatened by climate change. I have watched leaders ignore this issue for years but climate change is not something we can ignore for any longer than we already have. We have the technology that we need to combat climate change and we know what we need to do in order to make the transition to a greener world equitable and just. Now it is up to you to act.

International experts have urged action on climate with increasing fervor in recent years for good reason: the consequences of staying the course will be highly dangerous. Here in Maryland we have a lot at stake, with nuisance flooding, high heat days and storm surges already regular occurrences. We have an opportunity to listen to scientists now while signaling to the nation that Maryland is ready to embrace the new green economy. There is no more time to delay on meaningful climate action.

I encourage a FAVORABLE report for this essential legislation.

Signed,
Emma

testimony- Climate Solutions Now.pdf

Uploaded by: Bush, Emma

Position: FAV

January 28, 2021

Testimony in SUPPORT of SB 414 – *Climate Solutions Now Act*

Dear Chairman Pinsky and Members of the Committee,

Sunrise Movement Howard County supports SB414, the Climate Solutions Now Act of 2021.

Globally, we are at a critical choice point that will determine the course of our future forever. Climate change is already here, and we are the last generation that will be able to course correct towards a livable future for all. However, we have the tools, resources, and knowledge to take action right now.

This bill ensures Maryland will be part of the new green future by:

- Ensuring Maryland is in line with the current climate science by committing us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045
- Restructuring our approach to climate justice by mandating that a percentage of all future climate spending must go to “disadvantaged” communities in terms of climate change, a term to be defined by experts and stakeholders
- Ensuring that labor voices are represented in our planning process, and that jobs benefit those who need them most
- Taking several immediate steps to reduce emissions, such as planting 5 million native trees by 2030, electrifying state vehicles, requiring several net neutral buildings and mandating energy efficiency increases

Most of us at Sunrise Howard County are high school students, and we have grown up with the knowledge that our future is threatened by climate change. With the increasing urgency of this crisis, we have seen a disappointing lack of effort from all levels of government, including our state. We ask that you respect our voices and fight for a liveable future. We ask that you represent our voices at committee meetings and on the senate floor. We need you to act and support Climate Solutions Now, not later.

International experts have urged action on climate with increasing fervor in recent years for good reason: the consequences of staying the course will be highly dangerous. Here in Maryland we have a lot at stake, with nuisance flooding, high heat days and storm surges already regular occurrences. We have an opportunity to listen to scientists now while signaling to the nation that Maryland is ready to embrace the new green economy. There is no more time to delay on meaningful climate action.

We encourage a FAVORABLE report for this essential legislation.

Signed,

Emma and Defne

Hub Coordinators

sunrisehoco@gmail.com

testimony for sb414 climate solutions act.pdf

Uploaded by: Cardin, Nina

Position: FAV



Nina Beth Cardin
SB414 – Climate Solutions Now
Favorable
1.26.21

Dear Chairman Pinsky, Vice-Chair Kagan and Honorable Members of the Committee,

You have before you in SB414 one of the most important pieces of legislation dedicated to mitigating the impact of the climate here and elsewhere (for climate knows no bounds) and contributing to the improved welfare of all residents of the state of Maryland. And it does so while beginning to rectify environmental inequities suffered by front-line black, brown and low-income communities.

This bill will reduce greenhouse gases, create jobs and increase tree cover by 400% – which alone will address so many issues like improving air quality (by absorbing particulate matter not just greenhouse gases), mitigating the heat-island effect, contributing to stormwater management and the need to create green refuges in urban environments for both physical and mental well-being.

This bill will help urban and rural communities alike, reminding us we are all in this together.

And we know that not acting decisively now because we are afraid of the cost will end up costing us more in the future.

Passing this bill will also symbolize how seriously Maryland takes our role in contributing to the solution to the biggest existential challenge of our time. This problem requires all hands on deck.

It is the right thing to do because all of us have a right to a healthy environment.

I urge you to pass this bill.

Respectfully,

Nina Beth Cardin

SB 414_CBF_SUP_Ches Bay Trust tree planting projec

Uploaded by: Clark, Robin Jessica

Position: FAV

Organization Name	Grant Amount	Geographical Area Served	Geographical Area Served	Project Title	Project Description	# Trees Planted
Arundel Rivers Federation	\$ 25,000	Central	Anne Arundel	Church Creek Restoration Initiative, Phase III	This project is composed of several watershed restoration projects and sustained outreach and awareness programs in two distinct and under-represented communities. Approximately \$90,000 in funding is needed to complete this \$1.7 million portion of the Federation's \$15 million Church Creek Initiative. Major efforts include: Bywater Mutual Homes Outreach Program, Allen Apartments Community Outreach Program, Bywater Mutual Homes Stormwater Retrofits, Bywater Branch Stream Restoration, and Allen Branch Stream Restoration.	932
Alliance for the Chesapeake Bay	\$ 136,404	Central	Anne Arundel	Asbury Broadneck UMC Cemetery Restoration - Category 2	The Alliance for the Chesapeake Bay and its partners propose a stream stabilization and water quality improvement project at Asbury Broadneck United Methodist Church. This SPSC and natural channel project will restore approximately 420 linear feet of eroding ephemeral channel, reducing pollutants to Whitehall Creek and further negative impacts to the historic African American cemetery located on-site.	33
Blue Water Baltimore	\$ 58,830	Central	Baltimore City	Supporting Community Development through Green Streets in the Belair-Edison Neighborhood	Blue Water Baltimore working with Baltimore City and the community partners of the Belair-Edison neighborhood will plant 450 street trees while greening over 2.5 linear miles of streetscape in northeast Baltimore in a diverse, but low tree canopy neighborhood. A vacant lot and garden will be greened as well. This project was requested by our planning process called Deep Blue.	450
Southeast Community Development Corporation	\$ 75,000	Central	Baltimore City	Connecting Tree Canopies in Highlandtown	The Southeast CDC proposes to increase the tree canopy and remove impervious surfaces to reduce run off in the urban neighborhood of Highlandtown, in southeast Baltimore City. Our objectives are to reduce run off by removing impervious surface, planting 350 new trees, engaging English and Spanish-speaking residents through workshops that promote awareness of watershed health and restoration, and teaching residents and business owners about their connection to the health of the watershed.	532

Baltimore Tree Trust	\$	50,000	Central	Baltimore City	Trees for Public Health	<p>PROJECT DESCRIPTION</p> <p>Baltimore Tree Trust is seeking funding to expand the urban tree canopy in East Baltimore neighborhoods by cutting 100 new tree wells and planting 300, 2" caliper, trees. South Clifton Park and Broadway East currently rank amongst the poorest canopied trees in the city, with trees covering only 8% and 9% of total landmass respectively. Both neighborhoods have seen a historic divestment over the past sixty years, however, in the last year community partners and city officials have identified the area as a priority for reinvestment and have begun drafting plans to clean and green the neighborhood.</p>	300
Ridge to Reefs	\$	50,000	Central	Baltimore City	Urban Farm Expansion and Ecological Restoration at BLISS Meadows	<p>PROJECT DESCRIPTION</p> <p>This project is a collaboration between Ridge to Reefs and BLISS (Baltimore Living in Sustainable Simplicity) Meadows, a 10 acre land reclamation project geared toward food justice and creating equitable access to green space in the Frankford neighborhood in northeast Baltimore City. The project team will plant over 250 trees, expand an existing urban garden and farm, reforest over 2.25 acres, and create over 20,000 sq.ft of bio-swales. This project will engage and train the local community in agricultural and environmental restoration practices and will expand the urban forest of Baltimore while providing an accessible green space.</p>	250
Blue Water Baltimore	\$	72,755	Central	Baltimore City	Greening Greektown and Growing Resident Roots	<p>Blue Water Baltimore plans to green the Greektown Neighborhood in southeast Baltimore through street tree planting of over 200 trees and removing 0.16 acres of sidewalk. Building on previous community outreach work, we will engage more residents before, after, and during planting in education and outreach activities to ensure greater acceptance of the new trees and pride in the neighborhood. We will use this model for future outreach with our street tree projects.</p>	215
Blue Water Baltimore	\$	49,991	Central	Baltimore City	Supporting Community Greening in Mondawmin Neighborhoods of Baltimore	<p>Blue Water Baltimore will plant 180 street trees to improve 2 Mondawmin Neighborhoods of Baltimore City and grow the city's tree canopy. We are requesting funds based on both Robert W. Coleman and the Mondawmin community's interest and priority to continue to street tree planting in their neighborhoods. This project will both reduce stormwater volume and pollutants while improving the beauty and pride of these under-served but improving neighborhoods.</p>	180

Baltimore Tree Trust	\$ 74,993	Central	Baltimore City	Green and Clean Initiative: Berea	Baltimore Tree Trust, Volunteering Untapped, and Baltimore Trash Talk are collaborating to apply to both the Outreach and Restoration tracks to expand the impact of the Trees for Public Health program and increase environmental awareness. This project will focus on the education and involvement of residents of Berea in efforts to "green and clean" their neighborhoods while working to reforest their portion of the Harris Creek watershed. With the community and the volunteer manpower provided by VU, Berea will plant 170 street trees, and participate in a community day focused on environmental education, and litter reduction.	330
Baltimore Tree Trust	\$ 74,737	Central	Baltimore City	Berea Trees for Public Health	Baltimore Tree Trust (BTT) will lead a community-based effort to plant street trees within the Berea neighborhood of the Harris Creek Watershed area of east Baltimore City. Community outreach will consist of tree stewardship activities to, e.g., door-door survey, individual and community incentives, tree planting and care classes, and meetings with community leaders and stakeholders. The restoration portion will result in 100 trees lining neighborhood streets, all planted by volunteers led by BTT staff. Post-planting, BTT will water the trees and work with the community on additional of tree care related activities such as mulching and pruning.	276
Blue Water Baltimore	\$ 50,000	Central	Baltimore City	Improving Tree Health and Canopy in Deep Blue Neighborhoods	Blue Water Baltimore will target 3 neighborhoods in our Deep Blue Program to plant street trees to reduce the urban heat island effect and polluted runoff. Working with neighborhood partners and match from Baltimore City, we will plant 160 new trees and remove over 8,000 sf of concrete. Existing and new trees will live in homes with greater exposed soil. This will positively impact 150 homes in 3 low-income, diverse, and low tree canopied neighborhoods.	160

Blue Water Baltimore	\$	49,892	Central	Baltimore City	Supporting Community Greening in the Brooklyn and Curtis Bay Neighborhoods of Baltimore	PROJECT DESCRIPTION Blue Water Baltimore will support the Curtis Bay and Brooklyn communities located in South Baltimore to increase tree canopy within prioritized resident blocks and supported by resident led outreach. Last fall, we successfully planted 125 new street trees in Brooklyn. This spring, we plan to continue the project in Curtis Bay by adding 150 more trees. Both neighborhoods share a history of resiliency in the face of disinvestment, polluting industry and a general lack of city resources.	150
Canton Canopy	\$	38,900	Central	Baltimore City	Canton Canopy Tree Pit Creation Spring 2020-Fall 2021	PROJECT DESCRIPTION Canton Canopy is seeking a grant in the amount of \$38,900 to reduce impervious surface area, treat stormwater, green the neighborhood, and clean and cool the air in the Canton neighborhood of Baltimore City by creating tree pits, planting trees, and maintaining the trees once planted. Canton Canopy proposes to create approximately 150 new tree pits in the sidewalks along Fait and Linwood Avenues to achieve community engagement, increased tree canopy, and reduced stormwater runoff throughout the next year and beyond. These activities and subsequent outcomes will be achieved through community volunteer events planned and run by residents of Canton.	150
Blue Water Baltimore	\$	50,000	Central	Baltimore City	Supporting Community Development through Green Streets in the Druid Heights Neighborhood Baltimore, MD	Blue Water Baltimore will create Green Streets in Druid Heights Neighborhood of Baltimore, MD. We will plant and establish over 125 trees and remove over 5,000 sf of concrete from targeted blocks for revitalization along 5,000 linear feet of street. This project is supported by the Druid Heights Development Corporation and has in-kind support from Baltimore City's Forestry Department, TreeBaltimore.	125
Baltimoreans United In Leadership Development	\$	35,496	Central	Baltimore City	Greening Communities – Oliver Community Urban Canopy Campaign	PROJECT DESCRIPTION This application is founded on a resident-driven initiative to improve the urban tree canopy in the Oliver community. Residents are working with a community organizing group (BUILD), a local community development housing organization (ReBUILD Metro), a local church (Knox Presbyterian), and a Baltimore-area organization that specializes in implementing tree planting projects (Blue Water Baltimore). This effort will see to the planting of roughly 120 trees during this phase.	120

Baltimore Tree Trust	\$	66,331	Central	Baltimore City	Fells Point Gateway Tree Project	PROJECT DESCRIPTION For the Fells Point Gateway Tree Project we (BTT) and our partners at the Upper Fells Point, Fells Point, Fells Prospect and Douglass Community Associations will be planting a "gateway" of trees along Eastern Ave. and Fleet St. to create a green corridor running parallel to Patterson Park and the waterfront. This gateway will serve as a welcome to the southeast region of Baltimore city, and clean and shade this heavily trafficked walk/drive-through for residents and visitors. Our goal is to enhance the walkability, aesthetic, and public health outcomes of this area through green infrastructure.	100
Civic Works, Inc.	\$	20,000	Central	Baltimore City	Orchard Stewards Training Program	This is an outreach, train-the-trainer project for Baltimore City designed to recruit and train orchard stewards who can parlay the growing interest in urban orchards, human nutrition, and locally produced food into greater knowledge of, appreciation for, and engagement in local ecosystems and watersheds.	100
The 6th Branch	\$	50,000	Central	Baltimore City	Broadway East: Montford Corridor Greenscape	PROJECT DESCRIPTION In Fall 2019, T6B received a G3 grant to develop a Conceptual Plan, or "Greenprint," for the Broadway East community in Baltimore City, which will be completed this spring. To jumpstart implementation of this exciting plan, T6B and community partners are seeking implementation funds to begin improvements to the eastern section of the neighborhood. Vacant lots along a corridor of N. Montford Avenue have been identified as the highest priority for immediate greening improvements. Proposed improvements include lot and debris cleanup, impervious removal, and native tree and perennial seed plantings.	91
Baltimore City Department of Planning, Baltimore Green Network	\$	27,768	Central	Baltimore City	Creating a Ribbon of Green to Protect the Chesapeake Bay	PROJECT DESCRIPTION This project will create engineering design and permits to remove 14,610 square feet of impervious surface in the historic African American community of Druid Heights. The newly unpaved area will be incorporated into Cab Calloway Legends Park which will be maintained by the City of Baltimore. This park will provide an amenity to 87 homes built by the Druid Heights community for first time homebuyers in effort to build intergenerational wealth within this asset-building community.	82

Mount Royal Community Development Corporation	\$ 24,726	Central	Baltimore City	Growing the Urban Tree Canopy in the Mount Royal District	Three of the four neighborhoods in the Mount Royal District are participating in Parks & People Foundation's Neighborhood TreeVision program which trains residents to plant, maintain, and care for trees. The program trains residents to think strategically and plan for long term greening goals. The program doesn't provide funding to create new planting opportunities. MRDCDC leveraged funding in 2015 to create 43 new pits, expand 15 pits, and plant 43 new trees. Due to the successful implementation and expansion of the original grant goals, MRDCDC will be applying for new funding to create 25 new pits and plant 25 trees.	35
Parks & People Foundation	\$ 21,764	Central	Baltimore City	SuperKids Environmental Education Camp 2019	PROJECT DESCRIPTION Parks & People will deliver environmental educational lessons to 500 Baltimore elementary students created and led by 10 City high school students to improve academic performance and promote environmental stewardship. Youth will use their knowledge of Baltimore and lessons learned in a MWEE to form a claim using the scientific method; and, identify and undertake potential actions. Actions will connect to Baltimore's streams and align with the P&P SuperKids Camp summer program. Professional development and training modules for teachers will be provided to incorporate into classroom lessons. Student-led activities may include cleanups, celebration of water/waterways, recycling, or mapping.	30
City Neighbors Foundation	\$ 74,741	Central	Baltimore City	City Neighbors Green Campus Implementation	PROJECT DESCRIPTION City Neighbors Foundation proposes to install four stormwater Best Management Practices, treating 12,415 sq. ft. of impervious surface, and remove 1315 sq. ft. of impervious surface from our City Neighbors Hamilton/High School campus, located in Baltimore, MD. We also propose developing experiential environmental education curricula around these practices that will be used in our 3rd, 6th, and 9th-grade classes. When complete, this project will increase wildlife and pollinator habitat, reduce stormwater pollution, and will help inspire and empower our next generation of environmental leaders.	30

Let's Thrive Baltimore (F.K.A. No One Left Unhelped Inc)	\$	5,000	Central	Baltimore City	Restore the Water in Baltimore	PROJECT DESCRIPTION This project will improve natural resources, engage residents in outdoor activities that enhance communities. This project will inspire awareness to Baltimore residents on how to get involved with projects that enhance our community while saving and restoring neighboring waters that pour into the Chesapeake Bay. Educational workshop on the healthy harbor and protecting water quality. Pre-and post-surveys workshops participation hands-on training, city services contact information, and provide supplies to enhance the quality of life and reduce pollution in our community, storm drain stenciling workshops, and safety measures on shoreline cleaning.	20
The 6th Branch	\$	37,767	Central	Baltimore City	Conceptual Plan – Master Plan for the Broadway East Greening Initiative	PROJECT DESCRIPTION The Master Plan for the Broadway East Greening Initiative will identify environmentally sustainable infrastructure and land management techniques for adoptable, city-owned vacant lots in the Broadway East neighborhood of Baltimore City. This community-led effort will support future projects to add value to neighborhood open spaces; spur economic development; support watershed and Chesapeake Bay protection efforts; and beautify Broadway East. The Master Plan will conclude by developing 60% construction documents for four pilot projects, applying greening principles and maintenance techniques derived from the Master Plan development process.	16
Second Chance, Inc.	\$	75,000	Central	Baltimore City	Gateway Greening Project	The Gateway Greening Project is intended to control the flow and treat the water quality of stormwater from the parking lot in front of 1700 Ridgely Street and to reduce the pollutant load entering the Chesapeake Bay from this source. Secondary objectives are to: Increase awareness of the importance of stormwater management to the health of the Chesapeake Bay. Train individuals with barriers to employment in the construction and maintenance of stormwater management infrastructure. Demonstrate stormwater management best practices in a highly visible location along Russell Street, the Gateway to Baltimore.	16

Jane's House of Inspiration	\$	29,000	Central	Baltimore City	A-MAZE-N Recovery Garden	The A-MAZE-N Recovery Fruit Garden will combine restoration and outreach to build a garden on an abandoned lot in the East Baltimore Midway (Greater Greenmount) Community at the intersection of North Avenue and Kennedy Avenue, a neighborhood that is known for high drug use and crime and few places to find fresh fruits. The main objectives of this project will be 1) to increase access to and availability of fresh fruit for neighborhood residents, 2) to educate community members about nutrition and healthy food choices, and 3) to beautify the neighborhood through transformation of open green space.	14
Friends of Carroll Park	\$	1,250	Central	Baltimore City	Carroll Park Pollinator Meadow	Our primary objective is to reconnect unserved communities with the environment and unique opportunities for recreation and education. This project will engage local communities in reclaiming one acre of turfgrass in Baltimore City's Carroll Park and installing a native meadow habitat from seed. Informal presentations will teach residents about the benefits and functions of pollinator habitat. Volunteers and students will assist in the installation of fencing, shrubs, and plugs. The Carroll Park Pollinator Meadow will include a nature trail, pollinator hotels, insect waterers, and educational signage, inspiring individual action to restore and protect the Chesapeake Bay watershed.	10
Hamilton-Lauraville Main Street Inc.	\$	30,000	Central	Baltimore City	"The Lot" at 4500 Harford Road	PROJECT DESCRIPTION Hamilton-Lauraville Main Street (HLMS) is transforming 4500 Harford Road, known locally as "The Lot" into a community space, kitchen, and economic hub. The Lot will offer community engagement and "foodie" related activities such as farmer's markets, live music, dining pop-ups, family activities, community meetings, and collaborations with local organizations. There will be a stage, a pavilion, and areas for the farmers market on the grounds. The installation of green features and permeable surfaces in front of the building will make The Lot more visitor-friendly, conducive for public events, and while reflecting the community values of being green.	10

Friends of Carroll Park	\$	5,000	Central	Baltimore City	Carroll Park Pollinator Meadow	This project will create a naturally vibrant landscape in Baltimore City's Carroll Park in which communities can immerse themselves and reconnect with nature. The Friends of Carroll Park and Pigtown residents will reclaim and protect one acre of underutilized turfgrass and install a native meadow habitat for pollinators and birds. The meadow will include a nature trail, educational signage, pollinator hotels, and insect sipping stones. This project will provide unique opportunities for recreation and education to surrounding communities and visitors while ultimately making Pigtown a more restorative place to live and work.	10
University of Maryland Medical System Foundation	\$	5,000	Central	Baltimore City	Druid Heights Green Space Project with University of Maryland Medical Center and the Druid Heights CDC (Reduction In Motion)	PROJECT DESCRIPTION Vacant properties in the Druid Heights community can serve as public greenspaces to help improve resident health and well-being. The University of Maryland Medical Center is seeking funds to clean up and prepare a vacant lot for a future greenspace in this West Baltimore neighborhood. The objectives of this project are to form meaningful partnerships to engage community residents in a restoration event that will decrease stormwater pollution and provide education about the connection between environmental and human health. Funding in the amount of \$5,000 is requested for vacant lot permitting and a native planting event.	10
Let's Thrive Baltimore (F.K.A. No One Left Unhelped Inc)	\$	5,000	Central	Baltimore City	OUR BAY MUST STAY	Our project will include a community clean-up and tree plantings with residents and community leaders from the Family Survivor Network, Mt. Pisgah C.M.E. Church, The Green Team of AFSIOVA School, DPW and Purposed Propelled Media; to include, trash removal from gutters, sewers and grass, planting trees,bushes, and plants and installing recycled window seal flower pots in 80 window seals. We will provide educational pamphlets to the community and show and tell our work to other communities to encourage change. Our project will include a community clean-up and tree plantings with residents and community leaders from the Family Survivor Network, Mt. Pisgah C.M.E. Church, The Green Team of AFSIOVA School, DPW and Purposed Propelled Media; to include, trash removal from gutters, sewers and grass, planting trees, bushes, and plants. We will organize community workshops, provide educational pamphlets to the community and show and tell our work to other communities to encourage change.	10

Peoples' Community Lutheran Church	\$ 74,997	Central	Baltimore City	The Peoples' Rain Garden	<p>PROJECT DESCRIPTION</p> <p>Peoples' Community Lutheran Church (PCLC), an African National church upstream of Herring Run in North Baltimore City, seeks funding to replace portions of PCLC's parking lot with an expansive rain garden that will treat and reduce stormwater runoff. This rain garden is one component of a comprehensive stormwater retrofit design made possible through a CBT Watershed Assistance Grant in 2017. This Outreach and Restoration Grant will be leveraged to obtain funding from other foundation and government sources to implement the remaining design components, which include a bioretention practice and three water-retaining tree pits. This restoration work will serve as a launch point for educational programs focused on increasing the adoption of stormwater management practices among our congregants, other congregations, members of the local African diaspora, and Idlewood neighborhood residents.</p>	13
Mount Lebanon Baptist Church	\$ 17,021	Central	Baltimore City	Faithful and Anointed Creations	<p>Mount Lebanon Baptist Church in the Greater Mondawmin Neighborhood of Baltimore City seeks funding to install three stormwater planters and a 500-gallon cistern along the north entrance of the church to reduce stormwater runoff from our campus and contribute to a robust education campaign that promotes stormwater practices and deepens relationships to our waterways in the surrounding residential community. The planters, cistern and outreach programs will be matched by the installation of two large rain gardens in front of the church, and part of the funding sought here will pay for the redirection of gutters required for the rain gardens to function. We are excited by the potential of transforming our church campus into a public demonstration site exhibiting the utility and beauty of stormwater landscaping.</p> <p>Mount Lebanon Baptist Church in the Greater Mondawmin Neighborhood of Baltimore City seeks funding to install three stormwater planters and a 500-gallon cistern along the north entrance of the church to reduce stormwater runoff from our campus and contribute to a robust education campaign that promotes stormwater practices and deepens relationships to our waterways in the surrounding residential community. The planters, cistern and outreach programs will be matched by the installation of two large rain gardens in front of the church, and part of the funding sought here will pay for the redirection of gutters required for the rain gardens to function. We are excited by the potential of transforming our church campus into a public demonstration site exhibiting the utility and beauty of</p>	28

Reginald F. Lewis High School Agriculture Department	\$	5,000	Maryland	Baltimore City	The funding for this project will be utilized to cover expenses in conjunction with the Baltimore Orchard Project partnership, to educate agriculture students on the importance of stewardship while incorporating watershed benefits in the Baltimore Inner Harbor. Students learn the full cycle through hands-on experiences over the course of the 2018-2019 school year.	20
Saint Ignatius Loyola Academy	\$	2,085	Maryland	Baltimore City	Thirty seventh grade students and three teachers will participate in the Oyster Restoration Project on September 21-22, 2017. This year's group will assist in the continuing creation and study of the Fort Carroll oyster habitat. The two day program includes introductory background education on the Bay, its life forms and ecology, analyzing water samples and catches along the way, and hands-on work in the Living Classrooms Foundation onboard ship labs. The culminating experience of the trip is when students remove spat (baby oysters) from a harvesting site at Downs Park and relocate them at the Fort Carroll oyster sanctuary.	16
Saint Ignatius Loyola Academy	\$	1,785	Maryland	Baltimore City	Twenty-seven seventh grade students and two teachers will participate in the Oyster Restoration Project on October 1-2, 2015. This year's group will assist in the continuing creation and study of the Fort Carroll oyster habitat. The two day program includes introductory background education on the Bay, its life forms and ecology, analyzing water samples and catches along the way, and hands-on work in the Living Classrooms Foundation onboard ship labs. The culminating experience of the trip is when students remove spat (baby oysters) from a harvesting site at Downs Park and relocate them at the Fort Carroll oyster sanctuary.	16

Saint Ignatius Loyola Academy	\$	2,187	Maryland	Baltimore City	<p>Thirty seventh graders and three faculty will participate in the Oyster Recovery Project Project on September 20-21, 2018. This year's group will assist in the continuation of the creation and study of the Fort Carroll Oyster Habitat. The two day program includes introductory background education on the Bay, its life forms and ecology, analyzing water samples and catches along the way, and hands-on work in the Living Classrooms Foundation onboard ship labs. The culminating component of the experience is when students remove spat (baby oysters) from a harvesting site at Downs Park and relocate them to the Fort carroll Oyster Sanctuary.</p>	15
Saint Ignatius Loyola Academy	\$	2,305	Maryland	Baltimore City	<p>PROJECT DESCRIPTION</p> <p>Twenty-nine seventh graders and three faculty will participate in the Oyster Recovery Project Project on September 19-20, 2019. This year's group will assist in the continuation of the creation and study of the Fort Carroll Oyster Habitat. The two day program includes introductory background education on the Bay, its life forms and ecology, analyzing water samples and catches along the way, and hands-on work in the Living Classrooms Foundation onboard ship labs. The culminating component of the experience is when students remove spat (baby oysters) from a harvesting site at Downs Park and relocate them to the Fort Carroll Oyster Sanctuary.</p>	15
Baltimore Urban Debate League	\$	5,000	Maryland	Baltimore City	<p>PROJECT DESCRIPTION</p> <p>Students at 2 schools will natives plants/trees in planters around their school to increase awareness about reducing carbon, increasing green space and reducing runoff into the Chesapeake Bay and Harbor. This project will include students presenting their research to elected officials on important ways to reducing harmful effects to the bay and the climate are explicitly linked.</p>	15

Deep Roots Inc.	\$	19,250	Eastern Shore	Cecil	A Sense of Place	'A Sense of Place' will provide a series of environmental education workshops on a monthly basis for children and teenagers experiencing homelessness in Cecil and Kent Counties. Our main objective is to provide these children and teenagers with hands-on opportunities to learn more about different facets of the natural world in which they live thereby engendering a sense of deeper connection and roots that may be lacking in their lives due to domestic upheaval resulting from homelessness.	12
Rosedale Center for Alternative Studies	\$	5,000	Maryland	Central		We will complete a comparative, longitudinal study of biotic and abiotic factors across the Chesapeake watershed along with a service learning component. We will work at source locations of water that ends up in the bay. The locations are: Gunpowder river, Back River, Norman Creek, Back River sewage treatment plant, Oregon ridge, Potomac river (Great Falls, MD), and the main stem of the Patapsco river. The service learning component will comprise of bulk tire/trash removal and tree planting. Preparatory lessons and reflections will take place in the classroom.	125
ShoreRivers	\$	52,928	Eastern Shore	Dorchester	Greening Urban Vacant Lots - Cambridge Neighborhood Revitalization	ShoreRivers and partners, Habitat for Humanity Choptank and Cambridge Main Street, are proposing a pilot program to green vacant lots in a low-income neighborhood of Cambridge, MD to create multi-use community spaces that have environmental and human benefits. The vacant lot revitalization cohesively supports current programming called Neighborhood Revitalization that focuses on housing improvements in this neighborhood. ShoreRivers and partners, including the City of Cambridge Planners, have envisioned a "green corridor" of walk-able green space that can be achieved through vacant lot revitalization, beginning with this pilot program.	20

Cambridge Main Street	\$ 100,000	Eastern Shore	Dorchester	Implementation/Construction - 400 Block Race Street Parking Lot Improvement Project	PROJECT DESCRIPTION Cambridge Main Street supports the goals of the Cambridge Creek Watershed Assessment and Action Plan submitted and prepared January 2018 by Shore Rivers and funded by the Chesapeake Bay Trust. The alleyway and public parking corridor next to Blackwater Bakery was identified by the report. When we learned the parking lot was about to be repaved with traditional impervious surface we brought the project partners together with the goal of beautifying and improving with pervious materials and bio-retention plantings to meet the goals of the action plan and set a precedent for adjacent parking areas downtown.	10
The Community Ecology Institute	\$ 40,000	Central	Howard	Gardens and Groves Civic Ecology Project Series	For the Gardens and Groves Civic Ecology project series, the Community Ecology Institute (CEI) will partner with the Columbia Association (CA) to plant two new rain gardens and create two new native tree groves and six new pollinator gardens – a new conservation landscape project in the open space of each of the ten Columbia Villages. This project will engage diverse participants from each Village and the surrounding community as contributing partners in the development, creation and maintenance of each of these projects to sustain the direct benefits for watershed and habitat health benefits. Over the course of the ten project planting events and three seasons of maintenance events, participants will receive experiential education and supporting resources on how to bring such conservation landscapes to their own homes and neighborhoods.	200
The Community Ecology Institute	\$ 20,000	Central	Howard	Howard County Watershed Weekends: Connecting families with their watershed through experiential education	This project will deliver a series of twelve "Watershed Weekend" events in which diverse groups of families will learn how to be active watershed stewards. Most Howard County residents live within a half-mile of a storm drain or stream that leads to the Patuxent and Patapsco Rivers and ultimately the Chesapeake Bay. Building on the proven track record of CEI's flagship program, Columbia Families in Nature, educational and fun family events will be created to increase citizen awareness of and participation in water quality issues and projects as well as conduct restoration projects in collaboration with community partners.	100

Dunloggin Middle School	\$	4,020	Central	Howard	Re-establishing the Buffer Zone for Plumtree Branch	<p>PROJECT DESCRIPTION</p> <p>During visits to the Dunloggin Middle School wetland area after the Ellicott City flood events, students noticed an enormous amount of erosion and damage to the buffer zone along Plumtree Branch located in the Little Patuxent River watershed. The main objective of this project is to reinforce the buffer zone along the stream by planting trees that will not only filter the runoff from the school's P.E. fields before entering the stream but also stabilize the ground and help prevent further erosion of the stream banks.</p>	75
Pocomoke Middle School	\$	2,498	Maryland	Lower		<p>PROJECT DESCRIPTION</p> <p>Students will be participating in a year long study of the causes, effects and factors involved in changing water quality indicators in the Pocomoke River. Students will be participating in data collection, native garden installation and school-based recycling activities. Students will also be working with rangers at Shad Landing throughout the year to complete various maintenance projects. We are submitting data for the Statewide Watershed Report Card and the Student Summit that will occur at the Maryland Statehouse in May. We will also be continuing our storm drain stenciling project. The culminating activity will be a day long canoe trip on the Pocomoke with educators from the Chesapeake Bay Foundation.</p>	30
Our House Inc.	\$	70,000	Capital	Montgomery	A Community-Based Restoration Implementation Project: Conservation and Education - Improving the Environment and Outcomes for At-Risk Youth	<p>Our House will use a grant to accomplish the following: to reduce groundwater run-off by planting 5,000 square feet of native-species trees on a hillside on our property that is currently planted with invasive pear trees that do not absorb any significant ground water run-off and are a detriment to conservation; to engage the young adult male trainees who reside at Our House in the planting and in a conservation education program to educate them about conservation and its importance and impact so that they become knowledgeable and can in turn share this knowledge with their families and communities when they leave Our House; to create a "demonstration" enclosure area where the habitat remains natural so as to demonstrate the impact of conversation vs. natural habitat; and to create a conservation garden planted with native species at a central and visible location on the Our House property to reduce erosion / increase ground water absorption that will be planted and tended to by trainees in partnership with a landscape architect that will include signage to educate the community at large / visitors to the property.</p>	50

Alliance for the Chesapeake Bay	\$ 131,926	Capital	Prince George's	Track 1 Water Quality: Trees for Sacred Places	The TFSP program is a collaboration between the Alliance, IPC, and congregations in Prince George's County. We will engage 15 congregations in planting 450 trees across their properties and an additional 6 congregations in planting 300 trees on public/private properties to increase urban tree canopies and promote riparian buffer restoration. Participating congregations will be introduced to the County's ACP and receive credit for participation in Option 2 with the tree plantings. We will further engage congregants through environmental and faith-based educational workshops, which helps the County achieve increased outreach to the broader community.	750
Alliance for the Chesapeake Bay	\$ 30,000	Capital	Prince George's	Trees for Sacred Places Prince George's County	The TFSP program is a collaboration between the Alliance, Interfaith Partners for the Chesapeake and congregations in Prince George's County. We will engage 20 congregations in planting 5 trees on their properties using volunteers. An additional 25 trees will be given to congregants to be planted off-site at residential properties, totaling 600 trees planted throughout the County. Congregants will be taught how to plant and maintain trees as part of the on-site planting before receiving their own trees. Participating congregations will be introduced to the County's Alternative Compliance Program and receive credit for Option 2 using tree plantings.	600
Anacostia Watershed Society	\$ 45,000	Capital	Prince George's	Anacostia Wetlands Awareness and Restoration Effort (AWARE)	The Anacostia Wetlands Awareness and Restoration Effort (AWARE) seeks to engage 450 local residents and students to restore wetland habitat along the main stem of the Anacostia River in Maryland to improve the filtering capacity of the river, increase watershed residents' awareness of the importance of wetland habitat, and combat the loss of habitat brought about by invasive plant and pest species. The project will restore 2 acres of tidal wetlands and the tree canopy in 12 riparian acres that been severely affected by the mortality of Ash trees decimated by the Emerald Ash Borer in recent years.	580

Maryland National Capital Park and Planning Commission	\$ 150,000	Capital	Prince George's	Tracks 1&2 M-NCPPC Stormwater Stewardship	M-NCPPC's Stormwater Stewardship Program will install stormwater runoff projects at three sites and restore streambank forest buffers at five sites. One project will be in the Lower Potomac watershed; the remainder will be in the Anacostia River watershed. M-NCPPC will collaborate with PGPCS and other environmental groups to offer stormwater education and engagement to fifth grade classes at public schools near M-NCPPC facilities, provide engagement projects for community and student volunteers, deliver stormwater outreach programs at festivals and other community events, and engage youth in the Summer Youth Enrichment Program in conservation jobs at Bladensburg Waterfront Park.	500
Central Kenilworth Avenue Revitalization Community Development Corporation, Inc.	\$ 125,542	Capital	Prince George's	Tree Planting Projects on Private Individual Residential Property and Support for Existing County Tree Canopy Programs	This project will scale-up CKAR's recent tree canopy pilot project resulting in the planting and maintenance of 320 native trees (most 7-12' tall and 1-1/2" caliper) in priority areas identified in county-commissioned technical reports and strategies. At least 80% will be planted on private residential property. Tens of thousands of residents will learn about the importance of trees and the county programs available to assist them to plant and care for them during outreach to generate and fulfill planting requests from homeowners. The main objectives are to increase tree cover in these communities to improve health, environmental and community benefit.	322
Central Kenilworth Avenue Revitalization Community Development Corporation, Inc.	\$ 134,031	Capital	Prince George's	Grow Green With Trees - A Local Collaborative's Residential Greening Project	PROJECT DESCRIPTION Project Description Through a collaboration with Neighborhood Design Center, Liberty's Promise and Mac&Sons Tree Experts, this project will address the need of our East Riverdale community to plant trees that deliver shade, privacy and address storm water requirements of sites along Riverdale Road (U.S. 410), Kenilworth Avenue and other communities in Greater Riverdale (East Riverdale). The project will result in the planting and initial mulching by a minority-owned county company; with pre-planting agreed-upon maintenance by the property owner to care and water the trees planted. Three-hundred native trees (most 6'-8" tall and having 1-1/2" caliper) in this priority area identified in county-commissioned technical reports and strategies. At least 80% will be planted on private residential property. Residents will learn the importance of trees and shrubs and the available county programs to assist them to care for the trees/shrubs. The project includes outreach to generate and fulfill planting requests from homeowners. Many will be planted in the rear yards of families along The Purple Line Corridor where 19 homes were demolished to pave way for this on-grade transportation system; and two demonstration sites. There are over 36,000 residents in these multi-generational, multi-ethnic communities in Greater Riverdale/Bladensburg.	300

Maryland National Capital Park and Planning Commission	\$ 250,000	Capital	Prince George's	Tracks 1&2 - M-NCPPC Stormwater Stewardship Program	M-NCPPC's Stormwater Stewardship Project will install remediation projects at three community centers to treat runoff from impervious surfaces; it will also plant trees to restore streambank forest buffers at four sites in the Anacostia River watershed; these plantings will be accompanied by removal of exotic invasive plants in the restoration areas. Each project will be include projects for community volunteers and public school students and will be accompanied by outreach and citizen engagement projects related to stormwater runoff and solid waste issues. M-NCPPC will also develop a new outreach program to reach County residents at festivals and other community events.	470
Central Kenilworth Avenue Revitalization Community Development Corporation, Inc.	\$ 50,000	Capital	Prince George's	Technical Assistance in Engaging the Community to Plant and Care for 850 Trees in Prince George's County	This project funds technical assistance in engaging the community to plant and maintain 850 trees primarily in East Riverdale/Bladensburg TNI communities and adjacent municipalities. The main objectives are to increase tree cover in these communities to improve health, environmental and community benefit; build county-wide awareness and support for sustainable tree planting initiatives; environmental education and establish a pilot program that other communities in Prince George's County can complete to increase tree canopy in their communities.	123
Chesapeake Education Arts Research Society (CHEARS)	\$ 4,873	Capital	Prince George's	Chesapeake Intergenerational Open Seed Quest	PROJECT DESCRIPTION To foster the health and food security of the Chesapeake Bay Watershed, this project of the Chesapeake Education, Arts, Research Society (CHEARS), partnering with the School of Living (SOL) Heathcote Education, is to support the development and implementation of a series of 6 intergenerational hands on educational workshops, and the piloting of citizen science accessible seed trials. The project has a special outreach to underserved youth and to senior citizens and persons with disabilities and a goal of fostering rural-urban linkages. The project has a long term goal of establishing local heritage open organic seed exchange libraries throughout the watershed.	100

Global Health and Education Projects, Inc.	\$ 40,000	Capital	Prince George's	Family Tree Adoption Program (FTAP) of Prince George's County	The Family Tree Adoption Program (FTAP) of Prince George's County is a grassroots program that provides free native trees and shrubs to private homeowners using a family-based adoption and ownership model. Residents voluntarily adopt native trees or shrubs of their choice. Residents obtain free support from tree experts to determine the best trees for their yards, and then schedule a date for FTAP staff and volunteers to assist them plant their trees. Upon planting, residents take 100% ownership of these trees/shrubberies forever. FTAP presents a novel blend of on the ground tree planting that leverages the restoration components of tree planting to increase knowledge about personal stewardship actions that individuals can take in their own lives and/or own their own properties. FTAP fosters an ongoing community of tree lovers through online and in-person communication such as photo sharing FTAPs FB community page, newsletters, and informal education forums. FTAP will plant 100 trees and shrubs across PG communities with low tree canopy including the TNI and other high-priority underserved communities.	100
Anacostia Watershed Society	\$ 23,453	Capital	Prince George's	Harnessing the Power of Natural Filters	PROJECT DESCRIPTION Project Description Through this project, we will utilize mussels, wetlands, and trees to enhance habitat along the main stem of the Tidal Anacostia River and reduce stormwater runoff pollution making it to the Chesapeake Bay. We will construct floating wetlands with our fourth-grade Rice Rangers at Bladensburg Waterfront Park to give them a hands-on learning experience. We will create educational signage to teach visitors of Bladensburg Waterfront Park about the value of wetlands, mussels, and trees in restoring the health of the Anacostia River.	100
Anacostia Watershed Society	\$ 500,000	Capital	Prince George's	Track 5: Conservation Green Earth	This project will result in the development of the Conservation Green Earth program, which will meaningfully connect PGCPs students, teachers, and staff to stormwater management projects implemented on their campuses. This program aims to support implementation of Meaningful Watershed Education Experiences, the standardization and integration of stormwater education into the existing curriculum, professional development and educational resources for PGCPs teachers, and the installation of outdoor learning environments and site improvements on school campuses that complement stormwater retrofit projects implemented by the Clean Water Partnership.	100

Prince George's Green	\$	50,000	Capital	Prince George's	The Giving Trees	Prince George's Green proposes an Urban Tree Planting project targeting inside the Beltway communities. Prince George's Green has partnered with Ecoasis/Ciminelli's Landscaping to provide the native trees, planting, and maintenance of trees and with the Neighborhood Design Center to provide planting designs for common property such as Homeowner Associations, shopping centers, and municipalities. This project would reach out to private property owners through community workshops and would work in coordination with the Prince George's Department of the Environment.	100
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Parkdale High School	\$	200,000	Capital	Prince George's	Track 1 Water Quality: Creating Green Infrastructure for the Parkdale Community	This project will mitigate stormwater runoff through the design and creation of green infrastructure. It will provide hands-on stormwater stewardship education and community mentorships for Parkdale High School students.	50
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Anacostia Watershed Society	\$	11,510	Capital	Prince George's	Prince George's County Environmental Stewardship Training Courses	<p>PROJECT DESCRIPTION</p> <p>Project Description</p> <p>The Anacostia Watershed Society requests support from Prince George's County to implement our Watershed Stewards Academy (WSA) and Maryland Master Naturalist programs, through which we will train 60 watershed residents to be educated stewards of the Anacostia River and promote environmental stewardship in their communities. The goals of the programs are to promote awareness and appreciation of natural resources in Maryland, to develop a network of trained volunteers to serve as catalysts for environmental conservation, to provide a structured program to educate citizens, and to engage citizens in environmentally-focused service in their communities.</p>	50
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1853530	\$	-	Capital	Prince George's	Hall, Heidi - Urban Tree Canopy (1853530)	To plant 29 native trees at a residential property in Brentwood, Maryland.	41
Global Health and Education Projects, Inc.	\$	15,000	Capital	Prince George's	Track 1 & Track 2: Community Partnerships for Environmental Action and Sustainability (COPEAS)	Community Partnerships for Environmental Action & Sustainability (COPEAS) is a novel, 24-month-long, hybrid environmental action program that interweaves multicultural citizen awareness and engagement with a mid-sized water quality restoration project. COPEAS objectives are to 1) increase the awareness and participation of PG County residents, especially multicultural communities, in activities that improve the County's watershed health and local ecological ownership; 2) implement a mid-sized on-the-ground restoration-project that improves community aesthetics, water-quality, and watershed health by mitigating deleterious stormwater run-off where county's children play and recreate; and 3) lay robust foundation for readying our communities to be responsive to subsequent environmental projects.	109
City of Mount Rainier	\$	196,000	Capital	Prince George's	Track 1. Water Quality Projects – MOUNT RAINIER - GI projects for Commercial land uses	<p>PROJECT DESCRIPTION</p> <p>Project Description</p> <p>This application is a Track 1. Water Quality project. The overall objectives are to continue the progress made to date related to the design and construction of green infrastructure practices to achieve the overarching objective of making the City of Mount Rainier a model "green city".</p> <p>This specific application will focus on using the City's streets right of ways to treat stormwater runoff from commercial land uses in the city using a combination of bioretention / rain garden practices. Existing commercial land uses typically have large volumes of impervious surfaces, but currently individual owners are exempt from TMDL water quality requirements. The City can address this issue by installing control practices within its right of ways and also insure that success of the projects by providing the required maintenance of the practices.</p>	33

Carolina Missionary Baptist Church	\$ 2,200	Capital	Prince George's	CMBC Green Initiative	Carolina Missionary Baptist Church (CMBC) sits on 18+ acres of land in Fort Washington, MD. The CMBC Greening Project will allow us to do tree planting for improved storm water management, air quality improvement, and community beautification while also engaging our multigenerational congregation (which includes neighborhood residents) in an outdoor project. Interfaith Partners with the Chesapeake's Trees for Sacred Places Project, along with seasoned farmers and gardeners from our congregation will share knowledge and information with the volunteers who are eager to learn and apply that knowledge in their communities throughout the DMV area.	30
Town of Edmonston	\$ 1,250	Capital	Prince George's	Spring Environmental After School Club	PROJECT DESCRIPTION This will be an after school, bilingual environmental club for the town of Edmonston's middle school students and their classmates. The school partner will be William Wirt Middle School, with educational opportunities to be provided by a town educator, EcoLatinos, Latino Outdoors, Corazón Latino, the Anacostia Watershed Society, and the Chesapeake Bay Foundation. The club will be based at the Edmonston Recreational Center, with occasional field experiences in the area. The goal of this club is to engage the town's younger residents with environmental education, with a special focus on reaching those who are not English-proficient.	30
Saint Matthias Catholic Church	\$ 5,000	Capital	Prince George's	Educando y cuidando nuestra casa comun (Educating on and Caring for Our Common Home)	PROJECT DESCRIPTION The project we are looking to undertake is to develop a series of lectures and hands-on training in Spanish to teach about trees and their connection to the watershed. We will pair that education with a field trip and canoe ride at Jug Bay Wetlands Sanctuary to demonstrate trees in action and show the relationship between the two. The main objective is to raise awareness and demonstrate positive actions toward good stewardship in connection to the principles of our faith.	25

Friends of Lower Beaverdam Creek	\$ 114,227	Capital	Prince George's	RainWorks - Quincy and Moss Run Watersheds	<p>Design and build LID/ESD projects in Quincy Run Watershed vicinity. Incomes of property owners are inadequate to cover owner cost of projects otherwise eligible for Raincheck Rebates.</p> <p>Public works and development density contribute to extreme run-off/flooding conditions, damaging property in small rain events. Limited size, extreme grades, and proximity (to impaired receiving water) of properties create conditions requiring creative solutions. The multi-cultural community has a tradition of community service. Residents skilled in building and landscape trades produced a ready, able labor pool. Meticulous care that residents show to their property bodes well for continued project maintenance.</p>	25
Anacostia Watershed Society	\$ 384,057	Capital	Prince George's	Track 5: Treating and Teaching	<p>In order to connect students and teachers to stormwater projects on their campuses and support environmental literacy implementation in PGCPs, the Anacostia Watershed Society (AWS) will continue to collaborate with local partner organizations to implement the Treating and Teaching program. Using the foundational BMPs installed by the Clean Water Partnership as the focus, we will engage teachers and facilities staff in workshops, equipping them with the knowledge to utilize the BMPs as a teaching tool. Additionally, we will install outdoor learning areas at select schools to further enhance the ability of schools to conduct stormwater education on their school grounds.</p>	25
Town of Edmonston	\$ 74,720	Capital	Prince George's	Helping the Chesapeake's Water Quality by Creating a Green Street that Will Create Green Jobs	<p>Wedged between a state highway and the Northeast Branch of the Anacostia River and located next to a 13 acre brownfield, the runoff from this residential street brings toxins and trash into the Chesapeake Bay. But its residents want to change that by recreating this four-block thoroughfare in this low to moderate neighborhood, into a green street anchored by three rain garden that will capture the imagination of the community and 24 street trees. With a design shaped by the residents, this green street will protect and enhance the water quality the Chesapeake Bay area.</p>	27

Town of Capitol Heights	\$ 200,000	Capital	Prince George's	Chamber Avenue Green Street Project	<p>PROJECT DESCRIPTION</p> <p>The Town Council adopted a Green Street Master Plan in 2012 establishing the Town's commitment to incorporate green infrastructure practices as standard practice. This project is in alignment with this 2012 Master Plan.</p> <p>The objective of the project is to reduce the runoff from the roadway into the Watts Branch by reducing the road width, providing bike lanes to encourage alternative transportation to the Capitol Heights Metro station and provide water retention areas before any runoff makes it to the storm drains that empty directly into the Watts Branch stream which is a part of the Anacostia watershed.</p>	24
Town of Edmonston	\$ 148,000	Capital	Prince George's	1-Water Quality Retrofits for the 46th Avenue Green Street Project	<p>The project consist of 2 phases. Phase 1 includes design and construction of 8 curb side rain gardens located on 46th Ave between Ingraham Street and Lafayette Streets, which will treat 3.00 acres of impervious area. The second phase will address the older section of 46th Ave. which has a narrower ROW of 40 feet and does not provide a planting strip in which to locate the rain garden facilities. The Town will introduce an innovative practice, a permeable concrete curb & gutter section which is well suited to this narrow ROW and treat 2.8 acres of impervious surface.</p>	20
Neighborhood Design Center	\$ 15,000	Capital	Prince George's	Conceptual Plan - Windom Road Green Street	<p>PROJECT DESCRIPTION</p> <p>This project is to renovate approximately 1100 linear feet of Windom Road, between 39th Street and 40th Street, with streetscape improvements and green infrastructure. One block of Windom Road has been closed for decades, with a permanent barrier at the boundary of North Brentwood and Brentwood to separate the white and black communities. The green street will be a placemaking element and will improve water quality and reduce flooding in the neighborhood using green infrastructure elements. Signage will describe the environmental benefits and the connected history of the two towns.</p>	15

Town of Capitol Heights	\$	30,000	Capital	Prince George's	Chambers Ave Green Street	Improvements would occur on Chambers Ave, Capitol Heights Blvd, and Davey Ave to include bicycle lanes, improved pedestrian facilities, stormwater management enhancements, and streetscape/landscape/lighting improvements. Improvements are anticipated to be consistent with the 2012 Green Street Master Plan and generally consistent with the design concept plans submitted to the Town in August 2014, with stormwater improvements varying based on available right-of-way. The existing concrete channelized stream will be improved under a separate project in the Anacostia River Watershed Restoration Plan and is not anticipated to be disturbed as part of this project.	12
Interstate Commission on the Potomac River Basin (The)	\$	61,938	Capital	Prince George's	Track 2 Citizen Engagement	ICPRB's Score Four for Students, Schools, Streams and the Bay program will involve 400 students and 5 teachers from Northwestern High School (Adelphi), Parkdale High School (Riverdale), and the Academy of Health Sciences (Largo) in a series of watershed lessons and investigations that culminate in Student Sustainable Stormwater Action Projects at each school. ICPRB also will provide training to 8 teachers, and web pages containing stormwater lessons and community resources. Our goal is to provide the information, inspiration and County resources for individuals to become stewards who engage in sustainable stormwater actions on their campuses and in their communities.	11
Anacostia Watershed Society	\$	32,878	Capital	Prince George's	Greening Fairmount Heights	PROJECT DESCRIPTION The Greening Fairmount Heights project is a partnership between the Anacostia Watershed Society and the Town of Fairmount Heights to address stormwater runoff through community greening initiatives. We will work together to make the town-owned space on 61st Avenue into a vibrant community gathering place with increased urban tree canopy, native plant gardens, and educational signage to educate the community about how community greening can help absorb stormwater runoff while beautifying the community. Additionally, through this community greening initiative, AWS will engage town residents in clean-up efforts and other outreach and engagement events in the newly enhanced green space.	10

Cottage City	\$	4,060	Capital	Prince George's	Teaching Each Other in English and Español About Protecting the Chesapeake Bay	This proposal is to fund a year-long intercambio program where residents come together in fellowship once a month to teach each other about the environment and the Chesapeake Bay in English and Spanish. Those who are primarily Spanish speakers will teach residents how to speak Spanish and those who are primarily English speakers will teach residents how to speak English.	10
Town of Edmonston	\$	68,527	Capital	Prince George's	Track 1. Water Quality Retrofits for Lafayette Place Industrial Green Street Project	<p>PROJECT DESCRIPTION</p> <p>Project Description</p> <p>The Town of Edmonston is proposing to continue its initiative on its 4th green street located in the industrial district of Lafayette Place. This project will be Phase 4 of the industrial green street. Phase 1 included design and construction of 10 curb side rain gardens located on 46th Ave between Ingraham Street and Lafayette Streets. Phase 2 addressed the older section of 46th Ave. in which the Town is introducing an innovative practice, a permeable concrete curb & gutter section which is well suited to this type of narrow ROW. Phase 3 is ongoing and focused on Ingraham Street between 46th Ave and Lafayette Street. This 4th Phase will focus on Lafayette Place between 46th Ave and the northern town boundary. This project will treat 3.00 acres of impervious urban area, predominantly industrial land use. Treatment will be provided within the Town's right of way.</p>	10
Town of Edmonston	\$	169,530	Capital	Prince George's	Water Quality Retrofits for Ingraham Green Street Project	The Town of Edmonston is proposing to continue its initiative on its 3rd green street located in the industrial district of 46th Ave. This project will be Phase 3 of the industrial green street. Phase 1 include design and construction of 10 curb side rain gardens located on 46th Ave between Ingraham Street and Lafayette Streets. Phase 2 addresses the older section of 46th Ave. in which the Town is introducing an innovative practice, a permeable concrete curb & gutter section which is well suited to this type of narrow ROW. This Phase 3 will focus on Ingraham Street between 46th Ave and Lafayette Street. This project will treat 3.57 acres of urban area, predominantly industrial land use which includes 2.83 acres of impervious surfaces. Treatment will be provided within the Town's right of way.	10

Union Bethel AME Church	\$ 128,381	Capital	Prince George's	Track I Water Quality Clean Water for Union Bethel AME Church	The project will develop and implement an alternative compliance program for the church to ensure we receive the 100% impervious cover fee reduction available by including: 1) design and construction of two stormwater BMPs (one wet swale for the parking lot and one raingarden for the main church building); 2) outreach workshops on the impacts of individuals activities on water quality including the Rain Check Rebate Program and pet waste; and 3) good housekeeping plan development that will include elements such as water conservation, vegetation maintenance promoting native plant species, steps to reduce pesticides and herbicides use, and trash pickup.	10
New Hope Educational Institute	\$ 125,000	Capital	Prince George's	Water Quality NHA Parking Lot 1	We propose to replace 12,353.25 square feet of impervious asphalt into permeable pavers in the New Hope Academy parking lot in Landover Hills, MD. The objectives are to 1) capture and treat runoff from Varnum Street in Landover Hills, 2) reduce severe erosion in creek channel by decreasing flow volumes from Varnum Street, 3) educate students, teachers and local residence about how water moves through the neighborhood and the effects water has on the places where they live and learn, 4) engage students, teachers, staff members and parents in caring for the permeable paving.	22
Central Kenilworth Avenue Revitalization Community Development Corporation, Inc.	\$ 22,099	Capital	Prince George's	6801 Kenilworth Avenue	PROJECT DESCRIPTION CKAR CDC, Inc. requests funding as an adaptive and technical capacity project to be completed in our geographic service area. This area includes Riverdale and Riverdale Park, Woodlawn-Lanham and the towns of Cheverly, Bladensburg, Edmonston and the Port Towns. Most of this highly built-up area is within the Transforming Neighborhood Initiative (TNI) communities. The commercial corridors and residential driveways have a large amount of impervious paving, causing significant storm water management challenges that flow into the Northwest Branch, a tributary of the Anacostia River. This is a very diverse underserved area that includes significant Latino, African, Asian and African-American populations.	322

Global Health and Education Projects, Inc.	\$ 50,000	Capital	Prince George's	Track 4: Family Tree Adoption Program, Community Partnerships for Environmental Action and Sustainability (COPEAS)	The Family Tree Adoption Program is a grassroots program that provides free native trees or shrubs to private homeowners in Prince George's (PG) County, Maryland. The program helps green communities by increasing tree canopy, which, in turn, will improve air and water quality, community aesthetics, and provide benefits for years to come. Residents from 6 communities will voluntarily adopt native trees of their choice, obtain 1-year free support from tree experts on how to plant and care for these trees in their private yards and take 100% ownership of the trees/shrubs.	100
Maryland National Capital Park and Planning Commission	\$ 5,000	Maryland	Prince George's		PROJECT DESCRIPTION In this pilot program, Prince George's County students enrolled in environmental and agricultural career programs will participate in a summer jobs program in which they will plan and complete conservation projects, including vegetative restoration of a stormwater swale. Youth will earn certification as a Chesapeake Bay Landscape Professional Associate, about green infrastructure and careers in public lands management, green infrastructure, and sustainable landscaping, and satisfy graduation requirements. Parks and Recreation staff will work closely with CBLP mentors in order to be certified to administer the CBLP-A program independently and will offer this program to PGCPs students in the future.	150
University of Maryland College Park Foundation	\$ 5,000	Capital		UMD Alternative Breaks for the Bay	Alternative Breaks for the Bay is a year-long initiative to engage University of Maryland students in education, restoration, and protection projects related to the Chesapeake Bay through Alternative Break experiences. Student participants learn about the Bay's value to the region and its current condition, as well as environmental conservation topics at large. Students then travel to various Bay sites in Maryland, spending three to seven days immersed in the ecosystem and environment, learning alongside Chesapeake Bay Foundation staff, and providing support for restoration projects. Students return to campus to promote awareness and make personal commitments leading to a healthier Bay.	7200

Chesapeake Bay Foundation, Inc.	\$	563	Statewide	Student Restoration Engagement Network	PROJECT DESCRIPTION The Student Restoration Engagement Network at the Chesapeake Bay Foundation will get students involved in restoration events as volunteers throughout the year and gain insight into what environmental work takes place in their local watershed. Students will gain valuable hands-on experiences and make connections, while also adding to their college applications or resumes. The program will only require minimal maintenance on the part of full time CBF staff. The program will be listed on CBF's website as a resource for current students involved in the program but also as a reference point for potential new schools.	2000
Blue Water Baltimore	\$	25,000	Central	Urban Forestry & Workforce Development	The Urban Forestry & Workforce Development project will increase Baltimore's urban tree canopy by 12 acres, engage 750 volunteers, and provide critical job opportunities for the area's most vulnerable populations. The program's goals will be accomplished through the development of local Tree Stewards, technical support from Blue Water Baltimore staff, and a sustained presence for maintenance focused on tree survival. The primary results of this program will be improved water quality through a cost-effective stormwater Best Management Practice, increased resident awareness and leadership, and a new partnership established between the environmental restoration field and professional workforce development organizations.	392
Blue Water Baltimore	\$	4,872	Central	Increasing Urban Tree Canopy	We are seeking additional funding to purchase trees for public park and school property where we have seen a shortfall of funding in both Baltimore City and Baltimore County. Our overall goals are to engage 90 community volunteers to plant a total of 87 trees at 3 sites.	90

Anacostia Watershed Society	\$ 15,500			Building Community through Service with Anacostia High School	The Anacostia Watershed Society will engage 20 Anacostia High School students to improve the water quality and habitat of the Anacostia River through interactive learning opportunities and action projects in their Ward 8 community. We will communicate watershed principles and challenge students to explore why it's important to take care of the land near the river to reduce stormwater runoff and keep the river clean for aquatic life and other animals that depend on the river. Students will take an active role by implementing activities that focus on stormwater management, pollution prevention, and watershed restoration solutions. Through this program, students will earn up to 20 community service hours, helping them to meet graduation requirements.	10
iCARRe Foundation	\$ 4,505	Central	Anne Arundel	iCARRe New Kingdom Faith Green Project	iCARRe Foundation, New Kingdom Faith Christian Church, and St Albans Episcopal Church will partner to educate and inform our youth of the value of the Chesapeake Bay. The kids from iCARRe Mentoring will be supervised by the young adults of New Kingdom Faith as we plant 10 trees and install 5 rain water barrels at St Albans. New Kingdom Faith also will document and promote the project through its graphic artist with a social media campaign.	10
Carnegie Institution for Science, Dept of Embryology	\$ 17,500	Central	Baltimore City	Your Watershed, Your Backyard	BioEYES and partners will offer three annual Meaningful Watershed Educational Experiences to Baltimore 6th and 7th graders. Seven schools in Baltimore City and one Baltimore County school will attend a field trip to: local stream sites in an urban subwatershed, conduct an action project, and release trout in streams. Hands-on class and schoolyard instruction includes nine periods where students learn environmental literacy, stewardship and about careers in the sciences.	100

Canton Canopy	\$	19,138	Central	Baltimore City	Canton Canopy Tree Pit Creation Fall 2018-Spring 2019	Canton Canopy is seeking \$19,138 to reduce the impermeable surface area in the Canton neighborhood of Baltimore City by creating and expanding tree pits and maintaining new trees that are planted. We will create 61 new tree pits and expand 6 existing tree pits, planting trees in the new wells and following a maintenance schedule over the course of one year that will ensure they survive to maturity. This project will both help achieve goals to reduce runoff as outlined by the Harris Creek Small Watershed Action Plan and expand the neighborhood's tree canopy, which currently only measures 5%.	101
Canton Canopy	\$	18,050	Central	Baltimore City	Canton Canopy Tree Pit Creation Fall 2017-Spring 2018	Canton Canopy is seeking \$18,050 to reduce the impermeable surface area in the Canton neighborhood of Baltimore City by creating and expanding tree pits and maintaining new trees that are planted. We will create 49 new tree pits and expand 28 existing tree pits, planting trees in the new wells and following a maintenance schedule over the course of two years that will ensure they survive to maturity. This project will both help achieve goals to reduce runoff as outlined by the Harris Creek Small Watershed Action Plan and expand the neighborhood's tree canopy, which currently only measures 5%.	67
The Church of the Redeemer	\$	74,043	Central	Baltimore City	Parking Lot of the Future	PROJECT DESCRIPTION The Church of the Redeemer proposes to convert our 1.25-acre main parking lot into a showcase of environmental sustainability by installing 4,262 sq. ft. of bioretention practices, 2,415 sq. ft. of pervious paving, and 5,300 native plants, shrubs and trees. The project will include educational signage, environmental lectures and action days for parishioners and the broader community. The outcome of these efforts will be the annual treatment of over one million gallons of stormwater runoff, a significant increase in pollinator and wildlife habitat, and over 2000 individuals with a greater understanding of the need to engage in such work.	39

Brown Memorial Park Avenue Presbyterian Church	\$ 2,500	Maryland	Baltimore City		A series of watershed field trips and restoration projects to teach church and underserved community youth about watershed health and the health and environmental benefits of local food production. Trips will be coordinated with the Chesapeake Bay Foundation, the Living Classrooms Foundation, and several urban farms near the church community.	30
Land and Cultural Preservation Fund, Inc	\$ 15,273	Capital	Frederick	Amber Meadows Townhouse Association- Riparian Buffer Tree Planting	Amber Meadows THA Stream Buffer Planting project seeks to provide a comprehensive outreach and restoration experience to 1 community in the City of Frederick. The project seeks to increase the knowledge of 156 residents about watershed health through outreach and education, engage the neighbors in a tree planting (400 trees) on the THA's common space (2.75 acres), and increase the buffer and tree canopy size by 57% on a small stream in the Monocacy River watershed. Stream-Link seeks to instill ownership and a sense of pride in caring for the common space, the stream, and their watershed.	400
Howard County Conservancy, Inc.	\$ 25,776	Central	Howard	Howard County Conservancy Native Habitat Restoration Project	The Howard County Conservancy's Native Habitat Restoration Project will result in the restoration of 4.5 acres to aid native habitat creation and the protection of the East Branch Stream, part of the Patapsco River Lower North Branch Watershed. Located on the grounds of the Howard County Conservancy, a nonprofit environmental education center, 150 volunteers from the community will be engaged with readying the site and on Earth Day 2019, helping us to clear invasive species, plant native perennial and shrub seeds and 175 native trees. This proposed restoration project will reduce runoff and erosion, increase shade, support native wildlife and restore the native forest layers.	175

University of Maryland	\$	30,000	Central	Howard	HoCoWSA Social Marketing Outreach Plan	Howard County Watershed Stewards Academy (HoCoWSA) has secured cost-share dollars through our partnership with the Columbia Association to generously subsidize rain garden installations in the Village of Harpers Choice, and seeks assistance from the Chesapeake Bay Trust to develop a social marketing/behavior change plan. HoCoWSA and Water Words That Work, LLC will develop the plan together. HoCoWSA will implement the plan. The project will build on formative social marketing research funded by the Chesapeake Bay Trust and an evaluation of suitable residential properties, which was funded by the Middle Patuxent Environmental Foundation Partnership.	150
Pocomoke City	\$	13,500	Eastern Shore	Lower	Conceptual Plan- Pocomoke City Green Street Plan	Pocomoke City is applying for funds to develop a conceptual plan for future projects relating to greening various streets in the city, primarily in the downtown area. The objectives are to find how to reduce impervious surface, improve its street tree planting program, develop bio-swales, and rain gardens, and find other ways to reduce storm water run-off. The plan is to begin with the downtown and move further south in the residential areas in future phases of the project. Thirty street trees will also be planted.	30
Pocomoke Middle School	\$	2,498	Maryland	Lower		Students will be participating in a year long study of the causes, effects and factors involved in changing water quality indicators in the Pocomoke River. Students will be participating in data collection, native garden installation and school-based recycling activities. Students will also be working with rangers at Shad Landing throughout the year to complete various maintenance projects. We are submitting data for the Statewide Watershed Report Card and the Student Summit that will occur at the Maryland Statehouse in May. The culminating activity will be a day long canoe trip on the Pocomoke with educators from the Chesapeake Bay Foundation.	400

Talbot County Public Schools	\$	5,000	Maryland	Middle		Talbot County Public Schools (TCPS), the National Oceanic and Atmospheric Administration (NOAA) and Pickering Creek Audubon Center (PCAC) will partner to deliver lessons detailing the importance of wetlands, human effects on wetlands and how to restore wetlands. After utilizing the stream that runs along the back of Easton Middle School property for data collection the culminating activity for this activity will be a restoration project at PCAC. The objective of this program is to produce environmentally aware members of society, develop a sense of community service in the students and allow for real world, hands on, application of what has been presented to students in the classroom. After the initial classroom lessons the students will collect stream data with NOAA then become involved in all levels of planning and completion of the habitat project.	500
Metropolitan Washington Council of Governments	\$	31,119	Capital	Montgomery	Broadmore Hills Streamside Impervious Surface Removal and Replanting of Native Vegetation	The proposed project is located at 13122-13120 Broadmore Road, 25 Silver Spring, MD 20904. It lies in the Paint Branch watershed, a subwatershed of the Anacostia River. The objective of the project is to remove a 1,476 SF asphalt basketball court that lies adjacent to a stream and replant the area with native trees and shrubs. This project lies between to two other areas where tree planting has already occurred.	
Spencerville Adventist Academy	\$	4,965	Maryland	Montgomery		This project will introduce and reinforce the importance of conserving one of our nation's most important aquatic resource, the Chesapeake Bay; and the importance of maintaining the health of its watershed, which is vitally important to the health of the Bay. The project includes outdoor field experiences for fifth and ninth graders, and a BayScaping project that may be participated in by students from all grades, volunteers, and parents. The school is relatively new, so it needs some flower beds and trees; so the project calls for native perennial gardens and native trees on the school grounds.	20
City of Hyattsville	\$	60,762	Capital	Prince George's	Track 1 & 3 Hyattsville Tree Canopy Program	PROJECT DESCRIPTION Project Description The Hyattsville Tree Canopy Program with Track 1 that strives to increase the urban tree canopy through the existing efforts of Hyattsville environmental stewardship, management and its commitment to the preservation of trees and their contribution towards our community's economy, carbon footprint and the quality of life of our residents. Within Track 3, the City has engaged a consultant to develop a Tree Canopy study which will assist the City with identification of tree replacement. After completion of the study the City will provide education, outreach and mini-grants towards replacing trees and installation to continue the mission by planting new trees to absorb pollutants and releasing oxygen to better the air quality. Providing both tracks within our program will assist Hyattsville's efforts to reinforce our stormwater runoff and erosion, thus improving the Bay's water quality effect on climate change and improve the health of each of our residents.	125

City of Bowie	\$ 10,000	Capital	Prince George's	City of Bowie Private Tree Planting Behavior Change	Bowie residents understand the importance of trees yet do not take advantage of programs that help them plant trees on their properties. This is the pilot phase of a multi-year project attempting to increase private tree planting that addresses the barriers identified in focus groups and a phone survey. The goal is to change residents' attitudes about trees and to see at least 75 trees planted.	75
City of Hyattsville	\$ 20,431	Capital	Prince George's	Water Quality - Melrose Trail Rain Gardens	In 2014 this area was designed as a pedestrian/bike trail providing 24 citizens with access to the greater Anacostia Tributary Trail System. This project consists of the installation of a rain garden, meadow plantings, tree installation and a seating areas. Our objective is to capture storm water run-off from this 8400 square feet area, stabilize the landscape with native species and increase wildlife habitat while providing an inviting space for citizen and an educational area where area local schools can educate students on storm water, its' impact on the environment and ways we can remediate pollutants in our waterways.	
Town of Easton	\$ 8,058	Eastern Shore	Talbot	Town of Easton Street Tree Planting Project	The Town of Easton seeks G3 funding to increase the number of street trees to be planted in FY 2019 by 54 %.	160
Town of Easton	\$ 6,847	Eastern Shore	Talbot	Town of Easton Street Tree Planting Project	The Town of Easton seeks G3 funding to increase the number of trees to be planted in FY18 by 125%.	139
Town of Hancock	\$ 4,679	Western	Washington	'Beautifying Hancock'	The Town of Hancock will be partnering up with various organizations like the Hancock Rotary, Hancock Agricultural Students, Town of Hancock Parks Board, Antietam Conococheague Watershed Alliance (ACWA) and others are in pursuit of tree planting and mulching giving the community an opportunity to be engaged in giving back.	50
Highland View Academy	\$ 4,789	Maryland	Washington		This project will enhance the school's STEM curriculum by giving students outdoor hands-on learning experiences on four field trips with the Chesapeake Bay Foundation. The project also involves getting students involved in BayScaping, by planting native perennials and trees on the campus; doing projects on environmental issues affecting the bay; and sharing their projects with the community.	20

Alliance for the Chesapeake Bay	\$ 104,774	Central	Anne Arundel	Corcoran Woods Restoration Project: Phase II	The 215 acre Corcoran Woods is owned and managed by the State of Maryland and located on the northwest portion of the Sandy Point State Park property. Over the last several decades invasive plants have either replaced or degraded almost half of the property's upland and bottomland hardwood forests and threatens to infiltrate the remaining healthy acreage. The goal of our project is to implement the second phase of the Corcoran Woods project and restore an additional 27.3 acres of forest through invasive plant control and reforestation planting. Approximately 11,875 tree seedling will be planted on the entire 27.3 acres.	11875
Arundel Rivers Federation	\$ 378,487	Central	Anne Arundel	Gravelly - Kings Branch Stream Restoration	PROJECT DESCRIPTION Flat Creek's "Gravelly Grand Canyon" is a rapidly eroding tributary in the South River watershed characterized by incised and unstable channels. Stream banks are 6.9 feet high on average and reach heights of 18 feet in some areas. Restoration work will begin on Gravelly Community Association property and end on the County-owned Kings Branch Natural Area. The 3,432 linear foot project drains 208 acres, of which 17 are impervious. This project will prevent 2,446 pounds of nitrogen, 697 pounds of phosphorus, and 40.5 tons of sediment from entering the South River annually while creating new and enhancing existing habitat.	1621
Scenic Rivers Land Trust, Inc.	\$ 529,796	Central	Anne Arundel	Caldwell's Forest Conservation Project	This conservation project follows Tracts B & C, protecting 80.8 acres (68.8 forested acres, 5 acres to be reforested) in Crownsville with a permanent conservation easement held by Scenic Rivers Land Trust (SRLT). The project carefully protects the forest while allowing for the landowner to build a limited amount of structures within the fields. Three residential development rights would be extinguished. SRLT found this to be an important property to protect because of it's approximately 4,945 linear feet of stream, and being within a MD DNR Targeted Ecological Area, Audubon Important Bird Area, and an Anne Arundel County Greenway segment.	2675
Scenic Rivers Land Trust, Inc.	\$ 591,284	Central	Anne Arundel	Gaug's Forest Conservation Project	This conservation project follows Tracts B & C, protecting 78 acres (73 acres of forest, 5 to be reforested) in Crownsville with a permanent conservation easement held by Scenic Rivers Land Trust (SRLT). The project protects the forest by restricting development and certain activities. SRLT found this to be an excellent property to protect because of high DNR Green Infrastructure Assessment rankings, 2,871 linear feet of stream, reforestation of 5 acres, FIDS habitat including being a part of an MD/DC Audubon Important Bird Area, 5 acres of wetlands, and proximity to protected lands.	1595

Arundel Rivers Federation	\$	35,600	Central	Anne Arundel	Homeport Farm Park Reforestation	The South River Federation is seeking funding to complete prior reforestation efforts at Homeport Farm Park in Edgewater, Anne Arundel County, Maryland. Previous plantings (2005-2007) were not completely successful and invasive species dominate some areas. With grant funding, an Oak-Pine community will be fully established, and a vegetation management plan will be generated to help ensure the health and success of the reforestation efforts.	920
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Arundel Rivers Federation	\$	120,813	Central	Anne Arundel	Anne Arundel County Fairgrounds Invasive Removal & Reforestation	PROJECT DESCRIPTION The Anne Arundel County Fair has partnered with the Arundel Rivers Federation to remove invasive plants on 3.55 acres of forested land throughout the fairgrounds. After removing the invasives from these areas, the sites will be replanted with nearly 900 native trees and shrubs. An additional 0.6 acres of open space will be reforested beyond the original 3.55 acres. This project will engage the Boy Scouts, FFA and 4H Clubs as well as include educational signage that will remain on display for the thousands that visit the fairgrounds each year.	873
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Arundel Rivers Federation	\$	43,198	Central	Anne Arundel	Camp Woodlands (Broad Creek) Stream Restoration	PROJECT DESCRIPTION The Arundel Rivers Federation is partnering with Anne Arundel County's Watershed Protection & Restoration Program (WPRP) to implement a 1,300 linear foot stream restoration project at the Girl Scout's Camp Woodlands in Annapolis. WPRP managed and funded the design and permitting process while the Federation worked to obtain grant funding for construction. Grants from Maryland Department of Natural Resources and the National Fish & Wildlife Federation have already been obtained. This restoration will result in estimated pollutant load reductions of 492 pounds of nitrogen/year, 151 pounds of phosphorus/year, and 136.42 tons of sediment/year while increasing habitat and recreational value of the site.	700
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Scenic Rivers Land Trust, Inc.	\$ 175,296	Central	Anne Arundel	Forest Glen Conservation Project	Jimmie and Stacey Wolfe love the woods that are behind their property. They are very interested in buying the land from Belle Grove Corporation, a real estate development company, in order to permanently protect this high-quality forest from ever being developed or commercially logged. The Belle Grove Corporation is interested in this transaction but requires higher compensation for the property than the Wolfes can afford. This is where this grant comes in – to aid in permanently protecting a 27-acre high-quality forest within the Critical Area and put the forest into the hands of two people passionate about the health of the woods, as well as assist them with controlling 1.5 acres of invasive species and planting 525 trees and shrubs.	525
Chesapeake Rivers Association, Inc.	\$ 161,544	Central	Anne Arundel	Circle Drive Outfall Restoration in Winchester on the Severn	PROJECT DESCRIPTION The project will reduce storm flow and pollutants entering Chase Creek on the north shore of the Severn. The original Winchester 2017 RSC addressed an eroding gully in the main Winchester Ravine. Upon completion, the lower weirs and pools became overwhelmed by a new source of sediment from an adjoining ravine. The source was a newly replaced County stormwater outfall pipe on Circle Drive. Re-energized stormwater flow from the pipe has dramatically eroded the ravine, dumping sediment onto private property and community land and the original RSC below. Circle Drive RSC will correct this and stabilize the original Winchester RSC.	474
Fishing Creek Farm HOA	\$ 97,229	Central	Anne Arundel	Fishing Creek Farm HOA Healthy Forests Healthy Waters Initiative	PROJECT DESCRIPTION The Fishing Creek Farm HOA will work with a restoration professional to restore eight acres of degraded forests through invasive species removal and tree planting. The plan will follow the recommendations of our state-approved Forest Stewardship Plan. The proposed work is part of a broader effort of the HOA to sustain is natural resources including forests and shorelines.	400

Arundel Rivers Federation	\$ 198,950	Central	Anne Arundel	Killarney House & Neighbors Beards Creek Community BMPs	The Killarney House & Neighbors Community BMP project, located in the Beards Creek subwatershed of the South River, will address polluted stormwater runoff traveling across five commercial and residential properties. Created forested wetlands, bioretention swales, and a reforestation buffer will be installed as part of the series. This project will assist in the conversion of stormwater to groundwater, stripping runoff of its erosive energy as well as nutrients and sediment.	315
Arundel Rivers Federation	\$ 349,312	Central	Anne Arundel	Beards Creek Stormwater Outfall Retrofit and Stream Restoration	The Arundel Rivers Federation and Watershed Protection and Restoration (WPRP) are partnering to implement a 2,118 linear foot stream restoration project in the Beards Creek sub-watershed of the South River. WPRP funded and managed the design and permitting process while the Federation is working to secure implementation funding. This project will prevent 760 pounds of nitrogen, 124 pounds of phosphorus, and 9.3 tons of sediment pollution from entering Beards Creek annually through the installation of engineered wood structures that aim to reconnect the floodplain.	300
Chesapeake Rivers Association, Inc.	\$ 242,567	Central	Anne Arundel	St. Dixon Farm Restoration	The project is located on an operating sod farm that is located in the Whitehall peninsula between Mill Creek and Whitehall Creek in the Severn River Watershed. The Farm is located within Anne Arundel County, south of the intersection of U.S. Route 50 and Maryland Route 179, known as St. Margaret's Road, along Pleasant Plains Rd. The proposed project is correcting a drainage problem on the sod fields, which allows ponded stormwater to flow directly into two creeks, which feed Ridout Creek. The project will create a flow path extending 620 linear feet. This flow path will direct surface runoff from the sod farm through a series of sand-bedded pools and riffles that provide water quality treatment upstream before entering the sediment pond. A second flow path of pools and riffles will provide additional water quality treatment along 175 linear feet from the pond to the stream. These new flow paths will slow stormwater flows which in turn reduce surface erosion, allow sediments to settle out, increase water storage, and improve water quality. Subsurface water storage and infiltration will provide additional water quality improvements and create habitat.	273

Arundel Rivers Federation	\$ 192,940	Central	Anne Arundel	Herrington Harbour North Headcut Stabilization, Wetland Enhancement, & Living Shoreline	<p>PROJECT DESCRIPTION</p> <p>The Herrington Harbour North headcut stabilization, wetland enhancement, and living shoreline project will restore a rapidly eroding headcut in an area of the County that has seen little restoration work and increasing development. With full landowner support in a high-profile recreational location, this is an excellent opportunity to showcase restoration and stormwater management. The project drains 28 acres, of which over 32% is impervious. The project will prevent 66.9 pounds of nitrogen, 21.1 pounds of phosphorus, and 3.8 tons of sediment from entering Tracys Creek annually while creating new and enhancing existing habitat.</p>	245
Annapolis Roads Property Owners Association, Inc.	\$ 26,504	Central	Anne Arundel	Invasive Control and Reforestation of the ARPOA Mayapple Wood	<p>Annapolis Roads Property Owners Association (ARPOA) has embraced an effort to remove English ivy and other invasive plants from trees throughout the community. This grant will allow ARPOA to remove Ailanthus, English Ivy and other invasive plants from the 1.5 acre Mayapple Wood (MAW) at our Community Park and Beach. Then we will plant replacement native trees, shrubs, ferns, and herbaceous perennials. ARPOA hired goats to remove invasives from MAW in 2014. Residents were in awe when they saw the treasure revealed. We hope to inspire residents to care for trees on private as well as community property.</p>	238
Arundel Rivers Federation	\$ 164,010	Central	Anne Arundel	TriState Marine Stormwater Retrofit System	<p>The South River Federation is partnering with Tri State Marine (TSM) to install a "shovel ready" stormwater retrofit project located in Herring Bay watershed, a medium to high priority watershed under the County's WIP providing an annual TSS load reduction of 85% over existing conditions at a cost of \$20,608 /acre of impervious, if funded at the requested amount. If the grant is awarded, this SWM project will retrofit only existing untreated SW. The project includes the construction of BMPs consisting of a stormwater management wet pond, two bio-swales and a grass swale.</p>	500

Arundel Rivers Federation	\$ 100,000	Central	Anne Arundel	Broad Creek - Health Department Stream Restoration	The Broad Creek Department of Health restoration project will restore stability and functions to a 1000 foot ephemeral stormwater driven gully. The channel is highly unstable, leading to excessive delivery of sediment downstream. Stabilizing the gully and improving upslope stormwater management retrofits will stop a significant source of sediment and nonpoint source pollution from going into Broad Creek. The 2008 South River Watershed Assessment ranked Broad Creek as the second highest contributor of sediment and nutrient loads to the South River. The County's WIP listed restoration of incised streams, like this project, using SPSC as their "Core Tier 1" strategy.	200
South River Landing Condominium, Inc.	\$ 64,164	Central	Anne Arundel	South River Landing Reforestation Project - Track A	South River Landing (SRL), is a non-profit Corporation located on the South River and Almshouse Creek. All SRL is in the Critical Area and some of the work is in the Critical Area Buffer. SRL is requesting a \$72,671 grant to remove invasive plants, remove dead or dying trees and shrubs and plant 29 perennials, 223 shrubs and 126 trees, all native to the area. This work will improve and expand the forest canopy as well as slow down and divert storm water flow to allow it to infiltrate into the ground prior to flowing into the South River.	126
Arundel Rivers Federation	\$ 370,746	Central	Anne Arundel	Broad Creek - Health Department Gully Restoration Phase II	The Broad Creek – Department of Health stream restoration Phase II will restore a 750 linear foot stormwater driven gully that flows into Broad Creek. The channel is highly unstable, leading to excessive delivery of sediment downstream during even minor storm events. By stabilizing the gully and constructing additional upslope stormwater infiltration and detention devices in the parking lot, the Federation will stop a significant source of sediment and nonpoint source pollution from going into Broad Creek. The 2008 South River Watershed Assessment ranked Broad Creek as the second highest contributor of sediment and nutrient loads to the South River.	143

Arundel Rivers Federation	\$	13,722	Central	Anne Arundel	Historic London Town and Gardens Reforestation	The South River Federation is seeking funding to reforest and/or enhance three areas at Historic London Town and Gardens in Edgewater, Anne Arundel County, Maryland. This project will bring in 150 new, native trees and shrubs in addition to managing and area currently overrun with invasive plants. With grant funding, a more diverse plant community will be fully established and a vegetation management plan will be generated to help ensure the health and success of the reforestation efforts. Track A application.	124
Bay Ridge Civic Association	\$	21,503	Central	Anne Arundel	Bay Ridge Civic Association Reforestation Project 2018	PROJECT DESCRIPTION The BRCA is requesting a grant to fund the site preparation and reforestation of 37 acres in a conservation easement within Bay Ridge. The area is bordered on the south by Farragut Rd, the west by Annapolis Cove, and the north and east by West Lake Road. This project will require a certified arborist to remove dead trees, stands of invasive bamboo, paper mulberry, and other invasive weeds. Bay Ridge community members will plant 100 native species trees, put up protectors, and stakes. We intend to create a tree canopy.	102
Magothy Meadows Homeowners' Association	\$	2,500	Central	Anne Arundel	Magothy Meadows Tree Improvement/Expansion	PROJECT DESCRIPTION The tree buffer between the Community and College Pkwy has weakened in recent years. The HOA hired an arborist (Holly Oak Consulting LLC) to analyze (full report available upon request). This project will expand and enhance this area to improve privacy and provide some offset from tree removal that occurred for the Broadneck Trail. It includes both HOA property and County ROW (DNR approval for ROW pending). Project will follow species and planting guidelines specified in the arborist's report. Total project will entail approx. 150 shrubs/trees. Partnerships with Broadneck Environmental Literacy program and Watershed Stewards Academy are in development.	100

Arundel Rivers Federation	\$	2,291	Central	Anne Arundel	Preserve at Broad Creek Tree Planting	The South River Federation is seeking a \$2,291 tree planting grant for the Preserve at Broad Creek restoration project as part of a multi-phase tree planting project to engage the community in a hands-on project. The primary objective of the project was to turn a failing stormwater pond and the resulting eroding gully into a functioning stormwater wetland and step pool system to enhance the surrounding forested wetland, stream habitat, and riparian buffer. Another goal was to create a project that can be used to meet water quality goals and enhance habitat within the developed landscape.	75
Carroll's Creek Community	\$	2,500	Central	Anne Arundel	Tree beautification	The left side of the community has a Reforestation area which is filling in but beyond it continuing around and behind the next building there is hillside which needs landscaping attention. This is the area where the main emphasis of the project will be directed. We will install native tree saplings on a bare embankment, where turf is having a hard time becoming established. We will also install Vinca Minor to serve as a ground cover. Both of these will help prevent erosion issues, and will beautify the embankment.	75
Woods Memorial Presbyterian Church	\$	2,500	Central	Anne Arundel	Woods Church Woodlot Restoration and Improvement Project	The Woods' woodlot is a .61 acre parcel bounded by the Sunrise Assisted Living parking lot, Severna Park Library sidewalk and a sidewalk along Hilltop Drive. It is sparsely wooded. Its current use is to absorb storm water currently flowing from both the Church parking lot and the downspouts carrying rainwater from the eastern half of the Church building. 176 trees, shrubs, and plants will be planted in the tract in mid-April to beautify the tract, improve its ability to absorb and transpire water, and create additional habitat for pollinators, wildlife, and birds.	161
Tidewater Colony Open Space Association	\$	35,250	Central	Anne Arundel	Tidewater Colony Open Space Landscape Improvements	PROJECT DESCRIPTION The project consists of removing invasive vines and plants from the conservation easement areas that border on our Tidewater Colony Open Space Association property. Once the invasive plants are removed, we will be assessing the area for replanting native trees and plants to enhance our forest and protect the land.	50

Arundel Rivers Federation	\$ 364,225	Central	Anne Arundel	Broad Creek Park Stream Restoration (Phase III)	<p>PROJECT DESCRIPTION</p> <p>This project will restore approximately 3,760 linear feet of actively eroding stream as well as provide opportunities to enhance forested riparian buffer in Broad Creek Park in Anne Arundel County. The project approach is to install rock riffle weir structures in the existing channel with each structure spaced at approximate 6-inch increments of elevation. This approach will restore the incised stream by raising the groundwater, allowing flows to frequently access the floodplain rather than eroding the channel. The outcome will be reduced nutrient and sediment pollution to the South River, restored hydrology, and enhanced habitat along this forested stream corridor.</p>	50
Tidewater Colony Open Space Association	\$ 2,500	Central	Anne Arundel	Tidewater Colony Open Space Landscape Improvements	<p>PROJECT DESCRIPTION</p> <p>The project consists of removing invasive vines and plants from the conservation easement areas that border on our Tidewater Colony Open Space Association property. Once the invasive plants are removed, we will be assessing the area for replanting native trees and plants to enhance our forestry and protect the land.</p>	50
Severn School, Inc.	\$ 34,592	Central	Anne Arundel	Severn School, Stine Outdoor Education Center Reforestation Project	<p>The proposed project is a 1/2 acre reforestation project building on previous efforts by Severn School on their Severna Park campus. After decades without management, Severn took the first step by removing invasive species from the site, however the resulting forest floor lacks essential understory layers.</p> <p>Objectives:</p> <ul style="list-style-type: none"> - Establish next generation canopy trees by strategically planting native trees - Reduce polluted runoff, improve soil and air quality, and enhance habitat by establishing a healthy understory of native vegetation - Educate the School community about the benefits of healthy forests by engaging them in developing, implementing, and managing a productive woodland 	78

Arundel Rivers Federation	\$	47,331	Central	Anne Arundel	Beechnut Kennels Bioretention Project	<p>PROJECT DESCRIPTION</p> <p>PROJECT DESCRIPTION</p> <p>The Arundel Rivers Federation is requesting a \$47,331 grant to provide water quality treatment of stormwater runoff from a dog kennel facility's outdoor kennel area and impervious areas. This project will treat stormwater from 2.58 acres in two outputs: a forebay and a bioretention resulting in cleaner, cooler water that has been filtered through bioretention cells and native plants. The public, high-traffic location of this demonstration project will ensure that it serves as an example for other small businesses on how to reduce impact on their local watershed. Beechnut Kennels is contributing \$4,000 towards the project should grant funds be awarded.</p>	44
Arundel Rivers Federation	\$	41,770	Central	Anne Arundel	CAT South Swale Retrofit Restoration Project	<p>South River Federation is seeking funding to assist construct a stormwater bioretention cell on the campus of the Center of Applied Technology -- South (CAT-South), a magnet program of Anne Arundel County Public Schools (AACPS) located in Edgewater, Maryland. This project will address flooding issues experienced outside one of the school's workshops and help treat stormwater from 1.84 acres before it flows into Glebe Bay.</p>	32
Bay Ridge Civic Association	\$	1,779	Central	Anne Arundel	Bay Ridge Civic Association Forest Restoration 2015	<p>The Bay Ridge Civic Association is requesting a grant to pay for the planting of 30 5'-6' foot native trees. The land in a conservation easement which is overseen by the Scenic Land Trust. The BRCA manages this land under the guidelines of the Md DNR and the guidance of the SLT. We need to reforest this area and create a canopy which will encourage wildlife habitat and discourage the growth of invasive vines.</p>	30
Anne Arundel Watershed Stewards Academy	\$	40,000	Central	Anne Arundel	Clean Water Communities	<p>The Clean Water Communities neighborhood certification connects homeowners with the tools to reduce stormwater pollution and improve the health of our waterways. By changing old habits and installing new landscape features, communities reduced pollution and earned a designation as a Clean Water Community. This proposal will train both Master Watershed Stewards and Community Stewards in two communities and test and implement a program to engage two communities in residential restoration (40 practices), and adopting behaviors that will reduce pollution (approximately 60-80 households total).</p>	45

Annapolis Landing Homeowners Association	\$ 2,500	Central	Anne Arundel	Annapolis Landing Roadside Tree Replacement Plan	<p>PROJECT DESCRIPTION</p> <p>The Annapolis Landing Homeowners Association (ALHA) is requesting a grant to replace roadside trees that were removed by the county in the last two years. The ALHA has a landscaping contractor as a homeowner in our community who is willing to replace the removed trees and can purchase Red Maples at bulk for a discounted cost. The ALHA would like to replace 12-30 trees from September 2nd, 2019 through April 30, 2020 and has already submitted a permit to the Maryland Department of Natural Resources to plant the trees.</p>	25
Chesapeake Rivers Association, Inc.	\$ 102,390	Central	Anne Arundel	Coventry Court Dry Channel RSC-Category 2	<p>The proposed 120 If Dry Channel RSC is in response to a failed stormwater outfall. Located behind 1682 Coventry Court, it is a modified bubbler structure with boulder stabilization that was installed thirteen years ago during the Howard's Branch RSC stream and wetland restoration. Recent erosion has created an unsafe condition, with collapsed boulder structure and certain sediment deposition into the Howard's Branch watershed. Unlike the original design that was intended only to stabilize the maintenance haulroad, the new Dry Channel RSC will add significant treatment to this tributary drainage area, thereby enhancing the sand seepage and AWC wetland below.</p>	23
Chesapeake Rivers Association, Inc.	\$ 299,953	Central	Anne Arundel	Winchester on the Severn Dry Channel RSC	<p>Project purpose is to reduce storm flow volume and pollutants entering Chase Creek on the north shore of the Severn in Winchester on Severn. An eroding gully extends below the community rain garden on Winchester Rd for approximately 300 feet until it reconnects to the natural drainage course. The proposed Dry Channel RSC will stabilize the eroding gully by utilizing nine riffle grade controls, pools, and four boulder cascades and plants to handle stormwater prior to its entering the wetlands and Chase Creek below. It is estimated that it will treat 93% of the impervious surfaces within its drainage area.</p>	202

Arundel Rivers Federation	\$	30,000	Central	Anne Arundel	United Church of Christ Bioretention Swale and Pond Retrofit: Category 1	The South River Federation is requesting a \$57,020 grant to provide water quality treatment of stormwater running off a church building, parking lot, street, and other impervious areas surrounding the United Church of Christ. This project will convert a grass swale into a bioswale and retrofit a pond installed back in 1997 to treat runoff from 1.17 acres. This property drains to Church Creek, the most impaired creek in the South River, and a targeted priority area for the South River Federation's restoration efforts.	21
Arundel Rivers Federation	\$	1,456	Central	Anne Arundel	West Shoreham Community Planting	PROJECT DESCRIPTION The goal of this project is to help stabilize a shoreline and soak up stormwater on community property owned by the West Shoreham Community Association. The community is concerned with increasing erosion along their shoreline and would like to stabilize it with a Bay-friendly practice. This planting includes 17 shrubs, 4 trees, and a marsh planting.	21
Hillsmere Shores Improvement Association	\$	2,500	Central	Anne Arundel	Hillsmere Shores Buffer Planting	PROJECT DESCRIPTION The Hillsmere Shores Improvement Association is seeking a grant to plant trees at five locations in the community. The goals of this project are to increase tree diversity and canopy coverage, and provide buffers for the multiple stormwater BMPs that have been installed around the community.	20

Gravely Property Owners Association	\$ 2,500	Central	Anne Arundel	Maintain the Momentum - 2017 Gravely Invasives Control and Reforestation Continuation	This project is a continuation of a long standing effort to plant trees and improve woodland health in Gravely community's 29.2 acres of open space areas. This project will use volunteers for planting and professional assistance in continuation of invasive control prior to planting. This project is the 4th phase of the implementation of our Gravely Forestry Stewardship Plan created in 2013 and part of a larger coordinated effort.	29
Arundel Rivers Federation	\$ 50,000	Central	Anne Arundel	Holly Hill Harbor Restoration Project	South River Federation (SRF) is seeking funding to implement two series of in-line constructed wetlands on Holly Hill Harbor community property to treat stormwater runoff from 8.45 acres in the Rhode River. Around 500 square feet of pavement will be removed as part of the project. This project was started by the West/Rhode Riverkeeper, received a Watershed Assistance Grant for design, and will be constructed by the South River Federation.	20
Anne Arundel County Watershed Protection and Restoration Program (WPRP)	\$ 25,000	Central	Anne Arundel	Thomas Point Living Shoreline and Outreach	Anne Arundel County will create 300 linear feet of living shoreline and create 0.315 acres of saltmarsh at Thomas Point Park in Annapolis. The living shoreline will improve habitat and water quality while protecting a rapidly eroding 5.5 foot tall bank that is damaging the park's main roadway. As part of the project, educational events will be held at the park and informational signs will be installed in both english and spanish that discuss the importance of wetlands in providing habitat and improving water quality. The signs will target local Hispanic and African American fishermen who frequently use the park.	20

Annapolis Roads Property Owners Association (ARPOA)	\$	38,358	Central	Anne Arundel	Category 2 Project: Mayapple Watershed Remediation	<p>PROJECT DESCRIPTION</p> <p>The community of Annapolis Roads enjoys a beach and associated park area overlooking the mouth of the Severn River. A gravel parking lot in the adjacent wooded area associated with these popular amenities has stormwater runoff problems. The parking lot, located in a shallow valley, concentrates stormwater flowing into it and funnels the stormwater into the adjacent forest, where it gouges erosion channels, damaging this natural area. This watershed restoration project is intended to control runoff entering and exiting the parking area by removing 40% of the existing impervious parking surface and by the installation of infiltration berms. The infiltration berms and previously impervious area will be planted with site-appropriate native vegetation.</p>	17
Gravelly Property Owners Association	\$	2,500	Central	Anne Arundel	Gravelly Property Owners Association Invasives Removal and Reforestation Project	<p>This is a community tree planting and invasives species removal project on community property. Gravelly community includes 29.2 acres of open space composed of turf and woodland areas, many of which are infested with invasives that are threatening the health of the trees. Gravelly is located at the headwaters of Flat Creek and woodland health is vital to help prevent erosion and runoff. In 2013, the Gravelly Property Owners Association (GPOA) board of directors enlisted B.J. Forestry Services to develop a Forestry Stewardship Plan. This project would fund action items recommended in the Forestry Stewardship Plan.</p>	22
Paradise Orchard Community	\$	2,500	Central	Anne Arundel	Paradise Orchard Recreational Open Space	<p>The Paradise Orchard Open Space Project in Odenton will enhance the beauty of the community while supporting the Anne Arundel County Chesapeake Bay Restoration efforts. The project will include all native plantings and turf establishment to provide a neighborhood retreat for people and animals to enjoy. The project has leveraged the resources of the residents, volunteer experts and supportive small businesses to comprehensively improve this open space area.</p>	15

Riverbea	\$	9,105	Central	Anne Arundel	Riviera Beach Improvements	This project will demonstrate the ability to take a overgrown, uncared for lot and turn it into a beautiful and ecologically friendly environment. This area is not only at an entrance to the community but is on the watershed at Stoney creek. There is a lot of trash, invasive plants, weeds and a drainage gully that runs through here. I hope to have all this cleaned up and replaced with grass seed and plant some native trees.	12
Arundel Rivers Federation	\$	15,000	Central	Anne Arundel	St. Anne's School of Annapolis Rain Garden	The St. Anne's School Bioretention project will provide treatment of stormwater runoff from the school's roof by infiltrating stormwater volumes instead of transporting them directly into a swale in the Chesapeake Bay Critical Area. Stormwater volumes, in addition to nutrient and sediment loads, from a 0.63 acre drainage area will be reduced by bioretention cells located immediately downhill of the school's main building. The high profile of the project's location, along with the school's commitment to a strong environmental education, will ensure that this project serves an important educational role about the value of these systems in a campus context.	12
Berrywood Community Association, Inc.	\$	2,500	Central	Anne Arundel	Berrywood Cattail Creek Watershed Reforestation	The Berrywood Community is working in partnership with Marion Clement, Natural Resource Biologist, of the DNR to restore the headwaters of the Cattail Creek watershed area in the community. The DNR recommended expeditiously removing the invasive vegetation in the watershed area to enable the current native vegetation to thrive, and to plant additional native species vegetation suited to the environment. Berrywood is submitting this grant application to perform this task. The site was visited by Bud Reeves and Nathan Markline of AA Forestry on March 03, 2016, and we recently received approval of a Standard Vegetation Management Plan (VMP).	12

Gravely Property Owners Association	\$	2,500	Central	Anne Arundel	Gravely Woodlands Invasive Control and Tree Planting Project	This project is a continuation of a long standing effort to plant trees and improve woodland health in the Gravely community where the community owns 29.2 acres of open space, mostly woods. It will be a volunteer-based tree planting project, using volunteers for planting and professional assistance in invasive mitigation prior to planting. This project is the third phase of the implementation of our Gravely Forestry Stewardship Plan, created in 2013 and part of a larger coordinated funding effort.	30
Gingerville Community Association	\$	2,500	Central	Anne Arundel	Gingerville Conservation Landscape	This is a conservation landscape project to take a common area in the community that is currently half forested but overgrown with invasives and half grassed and replant the grass with natives and remove and treat the invasive area and allow regeneration of the existing native forestry.	11
Boy Scouts of America Troop 412	\$	2,300	Central	Anne Arundel	Fort Smallwood Preservation Eagle Scout Project - Matt Hartman	Based upon researched best management practices (BMP's) the project will involve the installation of a riparian buffer as an area of permanent vegetation at Fort Smallwood Park along the Rock Creek shoreline. The buffer zone will consist of plantings to include native shrubs, and trees. Riparian forest buffers are crucial to the retention of eroding shorelines, the protection and enhancement of the water resources of the Patapsco River and tributaries of the Chesapeake Bay.	15

Arundel Rivers Federation	\$ 86,665	Central	Anne Arundel	Turnbull Estates Innovative Bioretention, Oyster Restoration, & Living Shoreline Project: Category 2	PROJECT DESCRIPTION South River Federation seeks an \$86,665 grant to couple a bioretention project with an innovative living shoreline restoration approach utilizing the native oyster. Funding will be used to implement this new approach with two major outcomes. First: prevent further erosion of the native beach and marsh, and to allow accretion to create additional habitat with a structural shellfish component. Second: use the roadside ditch to infiltrate and process more nutrients than the current "transport" configuration. Both the stormwater and shoreline components of this project will reduce sediment flowing into Glebe Creek, the home of the River's only designated oyster sanctuary.	138
Arundel Rivers Federation	\$ 169,900	Central	Anne Arundel	Bacon Ridge Groundwater Recharge Micro-BMP and Outfall Restoration: Category 2	The " Groundwater Recharge Wetland" is a joint pilot project between the South River Federation and US Fish and Wildlife Service. The grant request for this project is \$169,900. The BMP will combine traditional bioretention on erodible/high infiltration soils with intentional shallow groundwater recharge in a two-phase BMP. We believe this BMP will have high utility for retrofits in built-out watersheds or no-till agricultural fields (areas with limited sediment supply). Previous attempts by partners to stabilize two outfalls with innovative organic, non-structural techniques failed. This application proposes to restore those outfalls with established restoration techniques.	142
Anne Arundel Watershed Stewards Academy	\$ 355,549	Central	Anne Arundel	Berrywood Community Cattail Creek Restoration	PROJECT DESCRIPTION PROJECT DESCRIPTION The Berrywood Community Association (BCA) is a homeowners association located in Severna Park. The BCA's property is transected by a section of Cattail Creek, a principal tributary of the Magothy River. BCA is partnering with the Watershed Stewards Academy and Maryland DNR to restore the stream and introduce stormwater BMPs to address erosion issues and to improve the water quality of Cattail Creek. Additionally, this project will provide vital habitat by removing a traditional bulkhead, in the community marina, with a living shoreline.	174

Old Mill Middle South	\$	1,450	Maryland	Anne Arundel	Students will be immersed in a field experience on the Chesapeake Bay. They will experience natural surroundings and learn about the flora and fauna native to the Bay. Students will get a hands on experience by using water quality testing technology and surveying live organisms. Students will also study the ecology of the schoolyard and develop solutions to mitigate their ecological impact. They will evaluate and implement at least one project to improve the school's campus.	75
Summit School, Anne Arundel County	\$	3,590	Maryland	Anne Arundel	PROJECT DESCRIPTION Middle school students from The Summit School will engage in STEM activities at Roedown Farms in Davidsonville, Maryland to explore the impact of the current animal population on soil macro nutrients, resulting water runoff and the impact of erosion. This activity will help students identify issues at the farm that may relate to more general conditions for the surrounding areas where they live, including water quality issues.	18
Summit School, Anne Arundel County	\$	4,240	Maryland	Anne Arundel	PROJECT DESCRIPTION Middle school students from The Summit School will engage in STEM activities at Roedown Farms in Davidsonville, Maryland to explore the impact of the current animal population on soil macro nutrients, resulting water runoff and the impact of erosion. This activity will help students identify issues at the farm that may relate to more general conditions for the surrounding areas where they live, including water quality issues.	15
Summit School, Anne Arundel County	\$	2,485	Maryland	Anne Arundel	Middle school students from The Summit School will engage in STEM activities at Roedown Farms in Davidsonville, Maryland to explore the impact of the current animal population on soil macro nutrients, resulting water runoff and the impact of erosion. This activity will help students identify issues at the farm that may relate to more general conditions for the surrounding areas where they live, including water quality issues.	15

Cylburn Arboretum Association	\$ 61,650	Central	Baltimore City	Construction of storm water facilities and outreach education program at Cylburn Arboretum	PROJECT DESCRIPTION This project at Cylburn Arboretum, Baltimore City, has three components: (1) collection, direction and treatment of storm water discharged from the roof of the Cylburn Mansion into new rain gardens; (2) treatment of storm water in an adjacent wooded area known as Moudry Woods, where new berms will slow the storm water and improve the infiltration capacity of the soils, reducing erosion and run-off; and (3) outreach and education to inform people attending three workshop programs about how to identify storm water issues and develop "best practices" to manage it on their own properties, reducing runoff and erosion.	14
Baltimore Museum of Art	\$ 4,984	Central	Baltimore City	Gertrude's Garden	PROJECT DESCRIPTION The goal of this project is to transform an eroding, barren slope behind Gertrude's Restaurant and create a beautiful oasis of plants, art and wildlife. It will be a visually engaging, educational, tiered landscape that stops erosion, reduces runoff, creates natural habitat, and produces quality, locally- sourced food for the restaurant. The site is on Baltimore Museum of Art's (BMA) and Johns Hopkins Homewood campus in a location that is passed by hundreds of students and city residents every day.	12
Baltimore Lab School	\$ 5,000	Maryland	Baltimore City		Baltimore Lab School Watershed Stewards is a program which combines education about the Bay and student-initiated action projects. Trips outside takes place in the fall through meaningful watershed experiences for all grade levels and action projects take place in the spring. The overarching goal is to give students a meaningful watershed experience, motivating them to both learn and care about, which in turn will help them develop action projects that are bay-specific projects. Because the Watershed Stewards program is interlaced into different subjects, projects would meet curriculum goals of the specific academic subject area and include student-developed watershed action projects.	50

Gunpowder Valley Conservancy	\$ 73,964	Central	Baltimore County	Maryland State Game and Fish Protective Association Bay-Wise Project	The Gunpowder Valley Conservancy (GVC), the Maryland State Game and Fish Protective Association (MSGFPA), and the University of Maryland Extension Master Gardeners of Baltimore County will conduct an outreach campaign and implement Bay-Wise landscaping practices at MSGFPA's 25-acre site located at 8735 Honeygo Blvd, Perry Hall, Maryland. The target audience will be MSGFPA's participants, with a focus on members, Scouts and Archers. The outcome will be the installation 2 micro-bioretenion systems, 1 rain garden, 1 Bayscape, 10 rain barrels, and 200 infill trees. 138 project participants will take a restoration action and 20 will implement Bay-Wise practices at their homes.	200
Gunpowder Valley Conservancy	\$ 30,000	Central	Baltimore County	Baltimore County Game & Fish Protective Association Bay-Wise Project	The Gunpowder Valley Conservancy (GVC), the Baltimore County Game and Fish Protective Association (BCGFPA), and the University of Maryland Extension Master Gardeners of Baltimore County will conduct an outreach campaign and implement Bay-Wise landscaping practices at BCGFPA's 43-acre site in Parkville, Maryland. The target audience will be BCGFPA's members, Scouts and other groups that use the site, and residents of local neighborhoods. The outcome will be the installation 2 micro-bioretenion practices, 2 rain gardens, 1 Bayscape, 4 rain barrels, and 187 infill trees. 260 project participants will take a restoration action and 11 will implement Bay-Wise practices at their homes.	187
Prettyboy Watershed Alliance, Inc.	\$ 3,150	Central	Baltimore County	Rockland Road Planting by the Prettyboy Watershed Alliance	Working with 20-30 volunteers, the Prettyboy Watershed Alliance (PWA) will plant native hardwoods on 1.5 acres of Baltimore City property surrounding the Prettyboy reservoir. Located along Rockland Road on the north side of the reservoir, the planting will add to Baltimore City's forest buffer that protects reservoir water quality and supplies drinking water to 1.6+ million Marylanders. We will protect each tree with a 5' woven poly deer shelter. The trees will be maintained by PWA with the assistance of Baltimore City's maintenance department who will provide mowing services.	150

Gunpowder Valley Conservancy	\$ 75,000	Central	Baltimore County	Miramar Landing Community Bay-Wise Project	The Gunpowder Valley Conservancy (GVC), the Miramar Landing Homeowners Association (HOA), and the University of Maryland Extension Master Gardeners of Baltimore County will conduct an outreach campaign and implement Bay-Wise landscaping practices at Miramar Landing, a townhome community in Middle River, Maryland. The outcome will be the installation 4 micro-bioretenion systems, 9 Bayscapes, 136 trees planted on 1.24 acres, and 10 rain barrels. In addition, we will certify the community common land and 6 residential yards Bay-Wise and teach homeowners how to plant "Tiny Bayscapes" in small townhome yards.	137
Towson University	\$ 23,054	Central	Baltimore County	Glen Arboretum Restoration at Towson University – Track 3	The goal of this proposed project is to further the mission of the Glen Arboretum on the Towson University Campus, which includes establishing and maintaining specimens of plants, and providing educational experiences for students and the surrounding community. Funding from the Chesapeake Bay Trust will help us achieve these goals by involving students in invasive removal and native tree and understory planting events, providing tables and benches for students, faculty and the community to passively enjoy the Glen, and by allowing us to increase educational signage and tree labels within the Arboretum. Improvements in the Glen will also contribute to the health of the encompassing Jones Falls Watershed through reduced coverage of invasive species, increased cover of native species, particularly groundcover, and decreased erosion of unstable banks and contribution of sediment to Towson Run.	60
Christian Temple	\$ 25,000	Central	Baltimore County	Christian Temple's Water Quality Restoration and Habitat Enhancement Project	Christian Temple in Catonsville, MD, located in the Patapsco River watershed, will implement four best management practices on seven sites. Stormwater runoff and erosion will be treated with one rain garden, a tree canopy extension, two areas of rainwater harvesting, and three conservation landscape areas, while also providing reductions in nutrients and sediment. The rain garden, tree canopy and conservation landscapes will utilize native plants to enhance habitat value. Planting of these practices will provide opportunities for hands-on education to our congregation, building and property users; and serve as a model for other Catonsville religious institutions.	18

Catonsville Presbyterian Church	\$	2,900	Central	Baltimore County	Woodlands Improvement and Development, Year 2	<p>The Creation Care Team, Catonsville Presbyterian Church, began to restore approximately one acre of wooded property in the Spring of 2017. Although projects completed in the first year had a significant impact, there is still a need to continue the restoration process.</p> <p>Year 2 projects: a.) control remaining/returning invasive, non-native species, undergrowth, and vines impeding growth of a variety of native trees; b.) develop additional mulched paths; c.) remove litter/trash; d.) plant additional native plants, shrubs, and trees; and, e.) extend the demonstration meadow habitat adjacent to the woodlands.</p>	11
Gunpowder Valley Conservancy	\$	75,000	Central	Baltimore County	Our Lady of Mount Carmel Bay-Wise Project	<p>PROJECT DESCRIPTION</p> <p>The Gunpowder Valley Conservancy (GVC), Our Lady of Mount Carmel (OLMC) church and school, Interfaith Partners for the Chesapeake (IPC), and the University of Maryland Extension Master Gardeners of Baltimore County will conduct an education campaign and implement Bay-Wise landscaping practices at OLMC's 8.5-acre site in Essex, Maryland. The output will be 12 educational workshops/events, the mobilization of 143 volunteers to take a restoration action, and the installation of 3 micro-bioretenion practices, 1 rain garden, 1 Bayscape, 4 rain barrels, and 10 landscape trees at the OLMC site. The outcome will be the reduction of stormwater and pollutants entering local streams and the Chesapeake Bay because the new BMP's will absorb and filter the stormwater.</p>	10
Catonsville Presbyterian Church	\$	4,975	Central	Baltimore County	Woodlands Improvement and Development, CPC-IPC Partnership	<p>This is a cooperative, neighborhood project headed by the Creation Care Team, Catonsville Presbyterian Church in cooperation with the Interfaith Partners for the Chesapeake dealing with a woodland located on church property. The project will a.) remove invasive, non-native species, undergrowth, and vines impeding growth of a variety of native trees; b.) develop mulched paths; c.) remove litter/trash; and, d.) develop a demonstration meadow habitat adjacent to the woodlands. This will make the woodlands a safer and more enjoyable resource for outdoor education classes of the Presbyterian Child Care Center, the adjacent elementary school, and the neighborhood.</p>	17

St. Paul's School	\$	1,223	Maryland	Baltimore County	Alter participating in the Living Classroom Sail, the fourth grade students from St. Paul's school will assist the Rangers in a tree planting event at the Robert E. Lee Park. The new trees will hold on to the soil, prevent sedimentation, filter the water returning to the Jones Falls, provide wildlife habitat and refresh the air. Students will advertise and provide information to the community at large about the Arbor Day Organization program, the Give-A-Tree Cards at Christmas. This program plants a tree in a national forest in honor of your loved one.	15
Calvert County Treasurer	\$	5,000	Maryland	Calvert	This program provides class-based curriculum to ninth grade students, and a subset travel to Battle Creek Cypress Swamp. The classroom lessons integrate the field experience, in particular, the effects of invasive species on ecosystem dynamics. During the field trip students work with naturalists to conduct research in the state-rare bald cypress swamp and scientific investigation of biodiversity. Students engage in a habitat stewardship project, where they remove non-native invasive species encroaching into the swamp and plant native trees and shrubs to restore the upland forest.	250
Calvert County Public Schools	\$	3,450	Maryland	Calvert	Third grade students in the Calvert County Public Schools will learn about the history of the diamondback terrapin and work towards the conservation of the species. Students will conduct classroom activities which will include the head-starting of a diamondback terrapin; and field work that will include a trip to the Chesapeake Bay to assess terrapin habitat as a potential sanctuary. Students will also conduct a tree planting action project in their backyard and community that includes an outreach component to raise terrapin awareness.	1200

Pickering Creek Audubon Center	\$ 68,400	Eastern Shore	Caroline	Exploring and Restoring Habitat with Caroline County Public Schools	Exploring and Restoring Habitat in the Chesapeake Bay Watershed is a new collaboration between Pickering Creek Audubon Center and Caroline County Public Schools (CCPS). Over the three-year term of the program, we will connect teachers and students to the watershed as they take on the roles of ornithologists, fisheries biologists, and restoration ecologists in the field. All ninth grade high school environmental earth science teachers and students from CCPS (430 students/five teachers/two supervisors) will participate in the project. In depth PD for teachers will include in depth use of the MWEE Guide and connections to scientists in the field.	500
ShoreRivers	\$ 22,284	Eastern Shore	Caroline	Greensboro Tree Initiative: Phase II	Midshore Riverkeeper Conservancy (MRC) is currently partnering with the Town of Greensboro to conduct an urban tree inventory and complete a Five Year Tree Planting & Management Plan by August 2017. The plan will prioritize potential tree planting locations by their ability to improve local water quality in the Choptank Watershed. MRC is requesting funding to support Phase II in 2017-2018: the implementation of planting the top 70 prioritized sites with native trees. MRC and the Town of Greensboro will utilize community volunteers in the planting; create a tree maintenance volunteer team; and host a homeowner tree planting workshop.	70
Delmarva Resource Conservation and Development Council	\$ 1,250	Eastern Shore	Caroline	Wetland Reserve Program Native Planting Event	This restoration project includes a native planting event to take place on a previously restored wetland in Caroline County on the eastern shore of Maryland in the Upper Choptank River watershed. Over 700 native trees, shrubs and herbaceous plants will be planted during a community planting event in spring of 2017 on a Wetland Reserve Program site owned by a private landowner. Wood Duck box kits will be assembled during a workshop with a local Girl Scout troop to be installed on site to provide habitat for these birds which are a trust resource for the Fish and Wildlife Service.	27

Town of Templeville	\$ 15,000	Eastern Shore	Caroline	Templeville Stormwater Pond Restoration and Protection Project	Templeville is seeking funding to develop a construction ready design to restore and protect the Town's park that features a storm water pond and recreational space. This project is located in the Upper Choptank River Watershed, in the Templeville Community Park. The main objectives of this project are restoration and protection of the pond and its environs, retrofit to address storm water, and rebuilding of park amenities. The WAGP will fund engineering design to ensure that this watershed restoration project contributes to the achievement of local WIPs and, by extension, to restoration of the Chesapeake Bay system.	24
Adkins Arboretum	\$ 75,000	Eastern Shore	Caroline	Implementation - Adkins Arboretum Parking Lot Alive!	PROJECT DESCRIPTION This project proposal seeks funding to implement high profile stormwater BMPs in the Adkins Arboretum main parking lot. Implementation of this project will demonstrate attractive and engaging practices for managing stormwater runoff. The project will replace 1,790 S.F. of impervious surface with a heavily planted bioretention garden and pervious paving. A bridge will traverse the bioretention garden leading visitors to the entrance of the Arboretum. The main objectives of this project are to improve water quality in the Choptank River watershed and to demonstrate innovative green infrastructure practices and provide costs related to green stormwater BMP retrofits.	35
Environmental Concern Inc.	\$ 1,249	Eastern Shore	Caroline	Native Plant Propagation Garden at Environmental Concern	The Native Plant Propagation Garden will be planted on Environmental Concern's waterfront property in Saint Michaels, Talbot County, MD. This project will include a native planting of select species that Environmental Concern (EC) propagates for wholesale, retail and restoration purposes, as well as species known to benefit monarch butterflies. It will also include the construction of solitary bee confinements to help with pollination and integrated pest management. Interpretive signage will be installed to enhance the garden's use in EC's educational plant identification courses.	12

Adkins Arboretum	\$	14,410	Eastern Shore	Caroline	Adkins Arboretum Wetland Enhancement Project	The Adkins Arboretum Wetland Enhancement Project, located at the Arboretum in Ridgely, Maryland will improve and diversify the wetland habitat and serve as an educational tool to all visitors and environmental stewardship youth and adult programs. This Track 3: Outreach and Restoration Project will include community involvement with invasive plant control, installation of native plants and youth and adult stewardship programs.	18
Carroll County Forest Conservancy District Board	\$	4,907	Central	Carroll	2017 Carroll County Forestry Board's Backyard Buffer Seedling Handout	The Carroll County Forestry Board administers the Backyard Buffer program to urban/suburban landowners that own small acreages (< 5 acres). Fully subsidized tree bundles are distributed in the spring to qualified applicants for plantings within 300 feet of a water body. Forested buffers convey a number of ecological and societal benefits, such as improved water quality and wildlife habitat. Current cost-shared programs, however, target large landowners, but the emerging population of urban/suburban landowners doesn't qualify for these programs. As a means to target this audience, and ensure greater planting success, we request funds to partially subsidize tree shelter costs.	2000
Carroll Soil Conservation District	\$	120,500	Central	Carroll	Wilt Road Stream Restoration	The Carroll County Soil Conservation District in partnership with its design/build consultant Ecotone Inc., is applying for project design funding under the Chesapeake Bay Trust Watershed Assistance Grant. The District intends to use this money to pay for a unique design project to improve water quality and habitat by incorporating stream restoration, and wetland creation best management practices. Effective installation of the BMPs will result in the reduction of 310.12 lbs/yr of nitrogen, 117.36 lbs/yr of phosphorous, and 115,534.32 lbs/yr of sediment from entering the Chesapeake Bay.	1421

Boy Scouts of America Venturing Crew 202	\$ 24,980	Central	Carroll	Crew 202 Tree planting at Morgan Run Center	The objective of this Boy Scout Venturing Crew 202 project is to reforest and maintain 2.5 acres of native forest near a tributary of Joe Branch within the Morgan Run watershed in Liberty Reservoir near Gamber, MD. This project will fill in unplanted areas at DNR's 27 acre Morgan Run Center. As with previous plantings, we expect a high degree of community involvement with as many as 200 volunteers participating. This reforestation will benefit water quality, improve wildlife habitat, reduce downstream flooding, reduce drinking water treatment costs and sequester carbon.	1000
McDaniel College	\$ 22,348	Central	Carroll	Singleton-Mathews Headwaters Project	McDaniel College seeks to scale restoration efforts at our 54-acre off-campus Singleton-Mathews property in Carroll County, Maryland. We are looking to partner with the CBT and work with diverse college students, along with faculty and staff, to develop 2.1 acres of woodland riparian buffer using native plant species. As a headwater of the Chesapeake Bay, the property hosts two cold-water springs, two ponds, and a perennial creek. The creek originating on the property is part of the Double Pipe Creek watershed and is a headwater of Turkey Run, which feeds the South Branch of the Patapsco before reaching the Bay.	800
Carroll County Public Library	\$ 5,000	Central	Carroll	Finksburg Library Community Garden Project	The Finksburg Library Garden Project is a community based effort designed to capitalize on the volunteer support demonstrated by our community for the Finksburg Library Branch. We are proposing to establish the Finksburg Library Community Garden within the Liberty Reservoir watershed. An enthusiastic group of founding members, comprised of master gardeners, gardening enthusiasts, resource experts and Carroll County Public Library staff is now developing the phase-in of three related garden sites surrounding the Library proper. This garden will expand the opportunity for our community volunteers and partners to preserve our natural environment while educating our community on the importance of caring for the Chesapeake Bay.	13

Manchester Valley High School	\$	5,000	Maryland	Carroll		The Enviro Club, National Honor Society, and Aquatic & Terrestrial Environmental Science students at Manchester Valley High School want to control soil erosion and increase biodiversity on a steep hillside which flows into a nearby stream. Students will research native and beneficial plants that retain the soil. Then students will design and choose the best plan, and do a school-wide planting. In the future, science classes will maintain the area and use as an example of how anyone can do their part to keep the Chesapeake Bay watershed healthy.	54
Girl Scouts of Central Maryland	\$	30,000	Eastern Shore	Cecil	Conowingo Tree Power	GSCM intends to reforest an acre of land on the Chimney Trail section of Camp Conowingo using native tree species. GSCM cleared a stand of 140 weak and aged poplar trees at this location in 2017, after having closed down a campsite once limbs from these hazard trees began to fall. This DNR easement area drains to the Susquehanna River. Sediment control and shading of low impact cabin units are the immediate outcomes of this reforestation project. An outreach and education project, combined with reforestation will provide a real-world experience in environmental stewardship to approximately 350 girls/young women.	140
Fair Hill Environmental Foundation, Inc.	\$	34,985	Eastern Shore	Cecil	Stewards of Tomorrow	Fair Hill Nature Center (FHNC) will work with Cecil County Public Schools to implement six hours of Meaningful Watershed Education Experiences (MWEE) with all 1200 CCPS 1st grade students. FHNC will provide fifteen hours of paid professional development to CCPS 1st grade teachers. FHNC will work with each class to complete action projects at each of the sixteen elementary schools. Community partners will help with the MWEEs, professional development sessions and the action projects throughout the 2016-2017 school year.	25

The Nature Conservancy	\$	17,364	Southern	Charles	Charles County Forestry Mixed Hardwood Restoration at TNC's Nanjemoy Creek Preserve	This reforestation project aims to restore native mixed-hardwood forest cover across two areas totaling 25-ac previously occupied by Virginia pine monocultures that were blowing over and creating a fire hazard. The vast majority of TNC's 2,683-ac Nanjemoy Creek Preserve project area is comprised of mature hardwood forest which provide high quality riparian protection and FIDS habitat. However, scattered areas within this larger holding were established as pine plantations for timber production purposes by previous owners, whereas our management objectives involve converting them back to more natural forest cover over time.	12500
Charles County Public Schools	\$	42,017	Southern	Charles	How can I impact my school ecosystem?	Charles County Public Schools (CCPS) will partner with The Alice Ferguson Foundation (AFF) to implement an environmental literacy program for 3rd grade students. CCPS and AFF will expand on existing curricula to develop an interdisciplinary full Meaningful Watershed Educational Experience (MWEE) for all 3rd grade students. Programming includes professional development with ongoing instructional support for teachers. The MWEE will be driven by the investigative question, "How can I impact my schoolyard ecosystem?" The systemic program will guide students through outdoor experiences and classroom learning resulting in action to address local environmental issues.	100
Charles Soil Conservation District	\$	42,500	Southern	Charles	Charles Co Ag & Env Serv Ctr 2018 BMP Implementation	This is a multi-faceted project that creates several conservation practices that serve dual purpose as nutrient and sediment load reduction practices as well as demonstration/training sites: native landscaping, bioretention/raingarden areas, grassed waterway and diversion, pollinator habitat and arboretum. Several additional sub-projects of which funding is requested will be used to supplement training of the diverse community pertaining to the conservation of our natural resources: interpretive signage and trails, improvements to existing educational pavilions and creation of a permanent soil pit for soil health training.	40

Nanticoke Watershed Alliance	\$ 26,695	Eastern Shore	Dorchester	Enhancing Stormwater BMPs for Poultry Farms in the Nanticoke Watershed for Improved Water Quality - Track 1 Outreach/Knowledge Building Project	PROJECT DESCRIPTION The Nanticoke Watershed Alliance (NWA) will help poultry growers develop alternatives to mowed grass on their property by testing variations of buffer plantings for improved stormwater management. The Nanticoke River Watershed has a large number of poultry producers. These facilities typically have large swaths of impervious surfaces that can be a source of stormwater pollution. Working closely with the poultry farmers, NWA will convert mowed grass areas between chicken houses into vegetative buffer to capture and filter stormwater runoff and reduce the amount of pollutants reaching the Nanticoke Watershed to reduce pollution to the Chesapeake Bay and its tributary rivers.	60
American Farmland Trust	\$ 30,000	Capital	Frederick	Women Landowners for Chesapeake Bay Water Quality	Women Landowners for Chesapeake Water Quality, will engage 45 women agricultural landowners and 24 professionals in Conservation Learning Circles, peer-to-peer facilitation to foster development and engagement in conservation implementation and succession goals in Frederick, Carroll, and Washington Counties. Ten graduates will work with Maryland Forest Service to install 435,600 sq feet of riparian buffers, to reduce 10,778 pounds of nitrogen, 662 pounds of phosphorus, and 8,138 pounds of sediment from entering the Chesapeake Bay annually. The buffers will include 4,000 new trees with 3,200 of native, 1,000 pollinator-friendly, and 100,000 square feet of invasive species removed.	4000
Chesapeake Bay Foundation, Inc.	\$ 17,805	Capital	Frederick	Upper Potomac Farm Stewardship & Outreach Program	CBF proposes to work one-on-one with farmers in the Upper Potomac watershed to implement and maintain forested riparian buffers, stabilize streambank, deliver technical assistance, and connect farmers with cost-share funds in Maryland's Upper Potomac watershed. CBF will recruit and coordinate community and student volunteers to accomplish restoration projects and cultivate environmental stewardship in the public. CBF will also accelerate farmer engagement, increasing our outreach to farmers in the region about sustainable agriculture, and promoting farmer success stories and conservation accomplishments through a Farmer Spotlight series on CBF's blogs, website, and/or social media.	3000

Land and Cultural Preservation Fund, Inc	\$	50,000	Capital	Frederick	Waterside Community Stream Restoration Project	Waterside Community Stream Restoration Project seeks to engage the Waterside Community in Frederick, MD in planting 1,380 trees, establish a 4.6 acre riparian buffer to improve water quality in Tuscarora Creek and the Monocacy River, both suffering from severe erosion, and rid the site of an invasive species. This project will work to have a positive long-term environmental impact and increase the knowledge in the targeted community about stormwater runoff and homeowner best management practices via a workshop to educate 50 participants, a mailing to reach all 588 households, and a storm drain stenciling campaign to stencil 15 drains.	1380
Frederick County Office of Sustainability and Environmental Resources (OSER)	\$	10,700	Capital	Frederick	Neighborhood Green Community Reforestation Project	PROJECT DESCRIPTION The Frederick County Office of Sustainability and Environmental Resources will offer targeted outreach through its Neighborhood Green and Green Leader Brigade programs in the Lower Monocacy and Potomac Direct Watersheds. The Neighborhood Green Community Reforestation Project will use volunteers and professionals to plant native trees on 8 acres in the Villages of Urbana and Canal Run properties and one volunteer tree planting on 1 acre within the watershed. The project will result in increased tree canopy with potential to improve water and air quality; provide wildlife habitat and ecological benefits; and, engage Frederick County citizens in stewardship and community restoration.	1000
Frederick County Office of Sustainability and Environmental Resources (OSER)	\$	320	Capital	Frederick	Creagerstown Park Tree Planting	My capstone project is to be the project manager for the tree planting located in at Creagerstown Park in Thurmont, MD as a part of Frederick County Office of Sustainability and Environmental Resources (OSER) Creek Releaf Program. The Creek Releaf program, is designed to increase the total amount of forested area within Frederick County, including privately owned lands and public properties. I will be working alongside of Frederick County Parks and Recreation for this project as they are developing park. Creagerstown Park is currently under construction and will include areas of reforestation. Planting these trees will not only benefits local residents by providing them with a scenic forest area, but will also benefits OSER in meeting the impervious acreage restoration requirements for the Municipal Separate Storm Sewer System Permit (MS4).	910

Frederick County Office of Sustainability and Environmental Resources (OSER)	\$ 1,250	Capital	Frederick	Riparian Forest Buffer Planting	The proposed project is a riparian forest buffer planting along Glade Creek at a privately-owned farm in Walkersville, MD. Three hundred native trees will be planted within a one acre area at the site. The project aims to improve the water quality of Glade Creek by filtering nutrients and sediments in runoff, reducing the site's flooding potential, stabilizing the stream bank and preventing erosion, and providing shade and leaf litter to the stream. Additional project goals include engaging the public on the environmental benefits of riparian buffers and engaging volunteers in stream restoration through hands-on experience.	300
Frederick County Office of Sustainability and Environmental Resources (OSER)	\$ 1,240	Capital	Frederick	Riparian Buffer Planting at Pinecliff Park	Since 2009, the Frederick County Office has conducted a stream restoration project and tree planting along Plankstone Creek in Pinecliff Park. Due to steep slopes, maintenance issues, and frequent flooding of the stream, the plantings have been unsuccessful and the restoration quality has degraded. The current proposed project will plant 300 native trees and shrubs within a 30,000-square-foot area along the stream to improve site quality.	220
Friends of Waterford Park	\$ 1,247	Capital	Frederick	Waterford Park Food Forest	This project will start a food forest in Waterford Park by planting native, food producing trees. The location for the Project will be in Waterford Park, which is a short 10 min walk from downtown Frederick. The main objective is to plant around 40 total trees of persimmon, pawpaw, hazelnut and service berry. We hope this project will increase the forest buffer for Rock Creek and provide local fruit to park users.	49

Carroll Creek Montessori Public Charter School	\$	4,843	Maryland	Frederick		Middle school students at Carroll Creek Montessori will participate in service projects and outdoor education within the Monocacy River Watershed in Frederick, MD. The main objective is for students to acquire a sense of belonging and a positive force of change for improving our local watershed through changes on their school campus. Furthermore, through class trips to the Bay, they will see how the watersheds are connected and our choices and actions have far-reaching impacts.	100
Alliance for the Chesapeake Bay	\$	75,000	Central	Harford	Healthy Forests. Healthy Waters: A Turf to Trees Program	The Alliance for the Chesapeake Bay will collaborate with Interfaith Partners for the Chesapeake and Maryland Forest Service to create an outreach plan to targeted private landowners and implement upland tree planting and riparian forest buffer projects on private suburban and agricultural lands within the Harford County Priority watersheds of Bynum and Winters Runs. Projects will be established by qualified natural resource contractors under the guidance of the Alliance and the ND Forest Service and deliver quantifiable nutrient and sediment reductions through afforestation projects on 11.5 acres of private land These plantings would be at least 1/3rd of an acre in size planted with bare root seedlings at a 10 ft. by 10.ft. spacing. (430 trees per acre). For church site plantings where larger stock trees might be desired (1/2" to 3/4" caliper) we will plant at a 15 ft. by 15 ft. spacing. (145 trees per acre). All trees would have deer and vole protection. In addition to the tree plantings, contractors will implement one year of maintenance to insure establishment of plantings and overall success of the project. Participating landowners agree to act as stewards of the installed plantings by maintaining the BMPs at a functional level for a minimum of 10 years as outlined in a landowner agreement.	4945
Alliance for the Chesapeake Bay	\$	74,901	Central	Harford	Healthy Forest Healthy Waters Harford II	PROJECT DESCRIPTION The Alliance for the Chesapeake Bay will continue to partner with Maryland Forest Service and local entities in Harford County to 1) target upland and riparian tree planting projects on private suburban and rural lands within the Bush River watershed and 2) educate local residents, community groups and faith based groups about the importance of trees and forested landscapes for water quality and quality of life. The Alliance will expand the collaborative Healthy Forest Healthy Waters program to install 12 acres of new woodlands and engage and train 100+ residents on how to increase tree canopy on their property.	3636

Harford Soil Conservation District	\$ 49,500	Central	Harford	Old Level Road Stream Restoration	The Harford Soil Conservation District is requesting funding to pay 350 for a comprehensive design to improve water quality and habitat, which will incorporate stream restoration and wetland creation best management practices. In the proposed design approximately 1,183 linear feet of stream will be realigned to a more stable planform and surrounded by livestock exclusion fencing. Effective installation of the BMPs will result in a reduction of 255.76 lbs/yr of nitrogen, 91.07 lbs/yr of phosphorous, and 67,276.87 lbs/yr of sediment from entering Graveyard Creek, a tributary to the Chesapeake Bay.
Havre de Grace Maritime Museum	\$ 4,500	Central	Harford	Invasive species and debris removal, native plantings and development of long-term invasive species management plan	This project will continue work conducted under FY 2014-15 grant 65 #12760 and and support from the Harford County Forestry Board, the City of Havre de Grace, the Lower Susquehanna Heritage Corridor and Maryland DNR and Conservation Corps, Board, volunteers and individual donors. Invasive plants over-ran the property and have required several herbicide treatments and rounds of physical removal and need more work in the spring; we will continue native plantings to re-vegetate the areas and debris removal. We are working with MD DNR), project lead Chris Beecraft and the City of Havre de Grace, project lead, Dianne Klair-see attachments.
Havre de Grace Maritime Museum	\$ 35,508	Central	Harford	Havre de Grace Living Shoreline Restoration and Storm Water Management	Our project would create a riparian buffer along 600 feet of cove 17 and tidal shoreline and a pilot storm water management initiative for rain barrel workshops and pet waste kits installed in our local parks. Creating a riparian buffer entails: clearing trash/debris; controlling invasive plants (in particular Japanese Knot-weed); planting indigenous bushes and low-growing trees; and educational signage along the targeted area. Our rain barrel workshop and outreach project would produce 75 barrels for HdG residents. Our community partners include the local Green Team, Tree Commission, Citizens Against Trash, Decoy Museum, High School and City of Havre de Grace.

Howard EcoWorks	\$	40,000	Central	Howard	Tree HoCo	Howard EcoWorks will engage private property owners in or adjacent to the Green Infrastructure Network (GIN) in tree planting projects, a new campaign called Tree HoCo, which will engage 135 people. Through Tree HoCo, an estimated 3 acres of private lands will be planted with 630 trees. In addition, 500 trees will be given away during two educational workshops. As a result of this planting effort, we will achieve multiple benefits of enhanced ecosystem services, increased habitat for wildlife and pollinators, reduced polluted stormwater to lakes and streams and overall beautification.	951
Howard County Conservancy, Inc.	\$	16,490	Central	Howard	East Branch Stream Buffer Planting Project	The East Branch Stream Buffer Planting Project will result in the expansion of the stream buffer to aid in the protection of the East Branch Stream, part of the Patapsco River Lower North Branch Watershed. Located on the grounds of the Howard County Conservancy, a nonprofit environmental education center, 132 volunteers from the community will be engaged on Earth Day 2018, helping us plant 355 trees in the proposed area. The proposed buffer will reduce erosion, improve water quality, and protect wildlife in and around the stream.	355
Columbia Association	\$	15,000	Central	Howard	Invasive Species and Reforestation projects in Columbia MD; Track 2: Restoration Project	PROJECT DESCRIPTION Columbia Association (CA) is the nonprofit homeowner's association/community service corporation created by Jim Rouse to manage and protect the more than 3600 acres of open space. This proposal asks for support from the Chesapeake Bay Trust to replace invasive species with native perennial plants at three Pull & Plant events, to plant 300 trees, and to install 500 live stakes along eroded stream banks all while employing the assistance of local volunteers. These restoration projects engage local residents, improve water quality, and enhance natural habitats.	300

University of Maryland	\$	30,000	Central	Howard	Education, Engagement & Implementation in the Patapsco Lower North Branch Watershed	The project is designed to engage the leadership, residents and students of neighborhoods and schools in the Patapsco River Lower North Branch Watershed of Howard County, particularly the Tiber Hudson subwatershed so participants will accept and implement landscaping practices that reduce polluted stormwater coming off impervious surfaces in their neighborhoods and schools. We propose to continue our successful program of local workshops, seminars, and community meetings offered to homeowner associations (HOAs) and neighborhoods, as well as the recently implemented school programming, TEAM DNR Chesapeake Bay Watershed Program designed by Department of Natural Resources (DNR) focusing on elementary and middle schools.	292
Howard EcoWorks	\$	50,856	Central	Howard	Making Suburban Lands Working Lands	PROJECT DESCRIPTION Private landowners in Howard County will increase the ecological value of their lawn areas while improving community resiliency through tree plantings, perennial agriculture planting, passive rainwater harvesting and participation in two educational workshops and one bus tour. Sixteen landowners have been engaged in planting of approximately 81,750 square feet (1.9 acres) and 220 trees and shrubs. The educational events will focus on methods, techniques and practical applications for Making Suburban Lands Working Lands to encourage conversion of turf grass to more functional systems that will benefit humans, wildlife and watersheds.	220
The Community Ecology Institute	\$	4,650	Central	Howard	The HOWARD COUNTY INTERFAITH FOREST PROJECT	The Howard County Interfaith Forest Project will include diverse community members for two years in the creation of a native plant forest while building community with shared ecological knowledge and values of watershed stewardship and climate change mitigation. Partnering with the Columbia Association and interfaith communities, the innovative Miyawaki technique of accelerated afforestation will be implemented to maximize the ecological value of the project and civic ecology practices will be used to enhance its social-psychological and cultural benefits. Participants will be trained in techniques that help them bring reforestation efforts to their neighborhoods by organizing their own civic ecology projects.	213

Friends of the Patapsco Valley Heritage Greenway, Inc.	\$ 29,998	Central	Howard	Track 1: Outreach/Knowledge Building: Patapsco Clean Stream - Education and Stewardship Efforts in Elkridge	PROJECT DESCRIPTION The Patapsco Clean Stream project in Elkridge, Maryland will focus on engaging a new audience to participate in our stewardship events with the goal of increasing knowledge of environmental issues while also conducting hands-on stewardship activities to ultimately improve the habitat and water quality within the local watershed. This project will mobilize at least 500 community volunteers to conduct at least 10 stream cleanups, 4 invasive plant removals, 2 native shrub and tree plantings, and storm drain labeling to reduce the amount of pollution and increase the native tree canopy in Elkridge, Maryland.	80
River Hill Watershed Committee	\$ 7,820	Central	Howard	River Hill Watershed Initiative 2016-18	The River Hill Watershed Committee has a proven track record of leading the charge on pulling invasive plants in local natural areas, planting natives, providing awareness to River Hill residents about the importance of watershed health, and educating how each person can improve the quality of our watershed through their individual actions. The Watershed Committee aims to augment their existing programs and providing additional rain barrels and native plants for the community, schools, and increasing their visibility as a means to affect greater behavior change.	40
Howard County Recreation & Parks, Natural & Historic Resources Division	\$ 1,247	Central	Howard	Shrub-Scrub Habitat Restoration	PROJECT DESCRIPTION This is a habitat restoration project, that is part of the Woodcock Management Plan in the Middle Patuxent Environmental Area. It focuses on restoring early successional ecosystems that the American Woodcock, and other species use as habitat, with additional goals of providing educational and wildlife sightseeing opportunities. This capstone project will restore open, second growth hardwood area that woodcock use for brood nesting. To create this ecosystem, a site has been selected, invasive species removal is underway, and native plants will be established. We will use this grant to buy the plants that will compose the foundation of this ecosystem. This is a habitat restoration project, that is part of the Woodcock Management Plan in the Middle Patuxent Environmental Area. It focuses on restoring early successional ecosystems that the American Woodcock, and other species use as habitat, with additional goals of providing educational and wildlife sightseeing opportunities. This capstone project will restore open, second growth hardwood area that woodcock use for brood nesting. To create this ecosystem, a site has been selected, invasive species removal is underway, and native plants will be established. We will use this grant to buy the plants that will compose the foundation of this ecosystem.	24

First Presbyterian Church of Howard County	\$	4,665	Central	Howard	Tracing the Patapsco River from Howard County to the Chesapeake Bay-IPC	<p>The Tracing project will engage many community volunteers to install six stormwater restoration Best Management Practices on either First Presbyterian property or Howard County land and help adults understand the interconnections between the health of HC rivers and health of the Chesapeake Bay.</p> <p>The Earth Forum of Howard County will provide the foundation of experience and organization to organize, coordinate, implement and evaluate Tracing.</p> <p>A unique system, Learning Environment and Volunteering as Earth Stewards (LEAVES), has been developed to manage volunteer time and activities. Participation will be recognized by providing an experience aboard the CBF Snow Goose laboratory vessel.</p>	16
Tanglewood Homeowners Association	\$	4,682	Central	Howard	Replace Invasive Bradford Pear Trees with Native trees	<p>The purpose of this grant is to involve the neighborhood in replacing invasive Bradford Pear trees with native trees appropriate for the site. Four Callery Pear trees will be replaced with 12 native trees. These trees are located behind the sidewalk in the 6300 block of Sunny Spring [road] Columbia, Maryland. Educational botanical signs will be installed near the public sidewalk as outreach to the general community. Volunteers to plant the trees will be recruited from the neighborhood and the local high school. Elderly and handicapped residents of our community will be encouraged to participate or observe the tree planting.</p>	12
Dunloggin Middle School	\$	998	Maryland	Howard		<p>Students remove trash from two local streams and calculate the amount of trash removed. The students remove invasive species and re-plant native species of trees along to prevent erosion. Through the establishment and maintenance of a wetland area, students are helping to create a natural habitat for wildlife as well as provide a buffer to absorb excessive nutrient runoff. The students perform water quality testing on the streams/ wetland area to determine the health of the water, take population samplings of the various organisms found in the area, and also have created and maintained nature trails through the area.</p>	75

Eastern Shore Land Conservancy's Sassafras Environmental Education Center	\$ 23,977	Eastern Shore	Kent	Agro-Ecology Through MWEE's	<p>PROJECT DESCRIPTION</p> <p>The Agro-Ecology through MWEE's project will continue implementation of a systemic 5th and 9th grade MWEE in Kent County Public Schools (KCPS) and revise the 4th grade field experience into a full MWEE. The Sassafras Environmental Education Center (SEEC) currently visits KCPS 4th graders in school and provides them with an outdoor experience. SEEC aims to incorporate an action project as well by conducting teacher professional development and providing the funds to do so through the Chesapeake Bay Trust.</p>	50
Chestertown Garden Club	\$ 2,793	Eastern Shore	Kent	Garnet Good Seeds Garden	<p>PROJECT DESCRIPTION</p> <p>The Garnet Good Seeds Garden will be a beautiful native landscape and education space, with edible plants, playful pathways, and tree stump seating. This collaborative community project will enhance H. H. Garnet Elementary School's curb appeal, visually connect the school to downtown Chestertown, MD, and foster a pride of place among students, teachers, and residents. Meaningful student experiences will connect to curricula across disciplines. A Chesapeake Bay Trust grant will help fund the Good Seeds Garden's Community Launch event and first phase of planting. Your support will help us achieve our community objectives of placemaking, education, and curb appeal.</p>	23
Ecotone Inc	\$ 369,825	Eastern Shore	Lower	Taylor's Island Road Wetland Restoration	<p>This proposal is for 15 acres of wetland restoration on a parcel on Taylor's Island Road in Dorchester County. The site is located on current agricultural land but has excellent opportunity for wetland restoration. The site is incredibly flat and has saturated soils with consistent on-site hydrology. Manipulating the hydrology to enhance the wetland area will require minimal grading.</p>	9000

National Aquarium	\$	4,950	Eastern Shore	Lower	Atlantic White Cedar Restoration	The National Aquarium seeks funding to implement a tree planting project at the Nassawango Creek Preserve. The Atlantic White Cedar Wetland Restoration project is an ongoing partnership entering its tenth year between the National Aquarium and The Nature Conservancy. Atlantic white cedar is ranked as a vulnerable tree species in the state of Maryland and is an important species within the wetland forest area being restored. We will work with local community volunteers to plant Atlantic white cedar seedlings and restore valuable wildlife habitat.	4050
Maryland Coastal Bays Program	\$	1,250	Eastern Shore	Lower	Ilia Fehrer Nature Reserve Restoration	The Ilia Fehrer Nature Reserve is a headwater forest in Berlin, Maryland. Eighty acres of the property were formerly a loblolly pine monoculture that was harvested to restore this area to deciduous forested wetlands. This year, 8.5 acres of the project will be planted over a series of community volunteer days and service-learning trips. The Maryland Coastal Bays Program is currently responsible for management of this property. Restoring native hardwood to create a deciduous pine mixed forest performs important services such as providing clean freshwater to waterways, increase biodiversity of forest interior species, and creating natural spaces for the community.	4400
GreenVest, LLC	\$	840,000	Eastern Shore	Lower	Birch Branch Wetland Restoration Project	The GreenVest team seeks funding under Application Track 1 (Contract) to design, implement, maintain and monitor the Birch Branch Wetland Restoration project within the Isle of Wight Bay Watershed. The project would provide 10.0 acres of wetland restoration (~9.0 acres re-establishment and ~1.0 acres rehabilitation of farmed wetlands) and 1.25 acres of non-tidal wetland for an maximum cost of \$857,590 [\$76,230 per acre (\$87,958 per mitigation unit)]. Additional acreage suitable for wetland restoration is available on the site and the project could be expanded, should additional funding be available.	3181

Salt Grass Bali Hi, LLC	\$ 329,369	Eastern Shore	Lower	Salt Grass Farm on St. Martins River	This project, along the impaired St Martins River in Isle of Wight Bay, is a dream location for nutrient reduction and wildlife habitat creation. Nestled on a 192-acre property next to 156 contiguous acres of protected land, the project proposes to restore and enhance 20.1 acres of marginal farmland and hydrologically impaired forest into a forested wetland with a few open areas for dabbling ducks and migrating shorebirds. An extensive easement will target not only the wetland but also 6.5 additional acres of an unprotected forest mitigation site that lies within the targeted restoration area.	1600
The Nature Conservancy	\$ 1,055	Eastern Shore	Lower	Shortleaf Pine Restoration	The Nature Conservancy's 252-acre Plum Creek preserve has undergone major restoration over the past decade. Loblolly pine plantations that once dominated the preserve, including a xeric dune, have been cleared to plant native tree species, such as the shortleaf pine, and fire has been re-introduced, creating early successional habitat in which fire adapted shortleaf pine forests, and the many mammal and bird species they support, thrive. This project will include the preparation of planting sites and the planting of 1,000 short leaf pine saplings at the Plum Creek preserve, furthering restoration efforts and contributing to overall site resilience and habitat health.	1000
Town of Berlin	\$ 75,000	Eastern Shore	Lower	Graham Avenue Submerged Gravel Wetlands - Track 3: Outreach and Restoration Project	The proposed project, entitled "Graham Avenue Submerged Gravel Wetlands", primary objectives are to improve water quality and reduce localized flooding. The project resides on an existing Town owned parcel, prior utilized as an electrical substation, which has been underutilized for years. The parcel resides within the headwaters of one of the worst flooding areas within the Town, and therefore has been selected for the installation of a submerged gravel wetlands facility for water quality with additional surface storage to provide water quantity management.	40

Ecotone Inc	\$ 500,000	Eastern Shore	Middle	Longwoods Road Nontidal Wetland Restoration	<p>PROJECT DESCRIPTION</p> <p>Ecotone has identified a 221-acre agricultural property to design and construct 13.09 acres of forested nontidal wetlands. The landowner has agreed to protect the restoration site with a Declaration of Restrictive Covenants and a Permanent Easement. The proposed wetland creation project is located just north of Easton, Maryland.</p>	10608
Maryland Department of Natural Resources	\$ 9,499	Eastern Shore	Middle	Edible Understory - Track 2 Restoration Project	<p>PROJECT DESCRIPTION</p> <p>The proposed project will plant 900 native fruit and nut producing trees and shrubs in a "walk and harvest" path at a publicly accessible location in Bloomfield Farm in Queen Anne's County. Local contractors will install and maintain the planting through mulching, invasive plant control and deer fencing. This project offers numerous ecological co-benefits: enhanced pollinator and bird habitat, as well as carbon sequestration, stormwater absorption and reduced runoff within the Corsica River watershed. Through informational signage and workshops, community residents will learn about edible natives and gain access to locally grown healthy food.</p>	900
ShoreRivers	\$ 38,545	Eastern Shore	Middle	Students for Streams: Sustainability and Expansion	<p>ShoreRivers is seeking to systemically implement our Students for Streams MWEE program in 7 public high schools across 4 counties in Maryland. ShoreRivers will work with Sassafra Environmental Education Center to develop and co-lead Kent County Public High School teachers through their first sustainable MWEE. ShoreRivers will continue to work with Dorchester, Queen Anne, and Talbot County Public Schools in order to provide professional development specifically designed to tackle obstacles that teachers identified in creating a completely sustainable MWEE, such as funding and lack of administrative support.</p>	50

Midshore Riverkeeper Conservancy, Inc.	\$	1,250	Eastern Shore	Middle	Unitarian Universalist Fellowship Riparian Buffer Planting/Nature Walk	The Unitarian Universalist Fellowship Riparian Buffer Planting/Nature Walk brings together restoration, education, and environmental stewardship. This planting will create an 11,000-square-foot riparian buffer on the property of Unitarian Universalist Fellowship in Easton, MD to reduce runoff entering the Tred Avon River. Additionally, the church's existing Nature Walk will be enhanced with additional plantings and educational signs to connect environmental stewardship with spirituality. Midshore Riverkeeper Conservancy hopes to forge a lasting relationship with more centers of faith in order to increase restoration efforts and engage a new and diverse audience in environmental stewardship.	32
ShoreRivers	\$	74,000	Eastern Shore	Middle	Students for Streams Professional Development Program	PROJECT DESCRIPTION Midshore Riverkeeper Conservancy (MRC) seeks to make Meaningful Watershed Educational Experiences (MWEE) more sustainably integrated in classrooms. MRC's goal is to provide teachers and administrators support, skills, and confidence to sustainably and systemically lead a full MWEE in 9th grade classes in Talbot, Dorchester, and Queen Anne's Counties, reaching 3765 students in three years. MRC will achieve this by: extended professional development programming, incorporating accountability in classrooms and counties; and building a support network for secondary teachers on the Eastern Shore. The long-term goal of this project is to identify practices in creating a replicable model for sustainable environmental education.	19
Talbot County Public Schools	\$	5,000	Maryland	Middle		Talbot County Public Schools (TCPS) and Pickering Creek Audubon Center (PCAC) will partner to deliver professional development to teachers and lessons detailing the importance of wetlands, human's affects on wetlands and how to restore wetlands to students. The culminating action for this activity will be a field experience and restoration project at PCAC. The objective of this project is twofold, to produce environmentally aware members of society and develop a sense of community service in the students. After the initial lessons the students will be involved in all levels of planning and construction of the habitat project.	160

Queen Anne's County Public Schools	\$	4,988	Maryland	Middle	QACPS students taking Environmental Science and Marine Life will have the opportunity to learn about the Chesapeake Bay watershed. Students will receive the opportunity to become environmental stewards and make a difference in watershed health through developing their own study. Students will be active learners analyzing their own data and present their study at QACPS first ever Environmental Leadership Symposium. Students will be able to discuss their study with fellow community leaders in Environmental Education and offer recommendations to make our streams and shorelines a healthier Chesapeake Bay watershed.	100
Church Hill Elementary School	\$	1,125	Maryland	Middle	CHES 4th graders will investigate the following question: How has the Chesapeake Bay and its watershed changed in the last 400 years? We will compare our current schoolyard observations, Chesapeake Bay report cards, water quality data from CBIBS and FieldScope to primary sources from John Smith and other early sources. Our field experience on the Chester River aboard the 1768 schooner Sultana will allow us to discuss changes along the river, sample marine life, conduct water quality tests, and examine plankton under microscopes. Following the trip 4th graders will create a schoolyard nature trail with signs and field guides.	70
North Caroline High School Green Club	\$	2,500	Maryland	Middle	Students will carry out environmental education and service projects that benefit the school and community, through establishment of a pollinator garden, participation in off-site environmental projects like habitat restoration, water quality testing, macro-invertebrate surveys and completion of Green School Recertification. Students will become environmentally literate stewards by better understanding how ecosystems work, how human activity affects the environment, and how people can adopt sustainability practices. They will accomplish this by maintaining and monitoring wood duck nest boxes and rain garden, recycle weekly, and develop research projects, prepare and exhibit displays that document learning out in the community.	45

Audubon Naturalist Society of the Central Atlantic States, Inc.	\$ 47,873	Capital	Montgomery	"Nature for All" Riparian Forest Buffer Restoration	Alongside a stream stabilization, ANS will restore a 209,960 square foot forest buffer that suffers from invasive species, absence of understory, native tree recruitment failure, and loss of canopy trees with stream bank erosion. To ensure the future of a healthy riparian forest, we will plant 940 native trees and shrubs, 2,208 herbaceous plants and 4.4 pounds of seed. This will filter and slow stormwater runoff to Rock Creek, while also enhancing habitat for understory dependent birds and amphibians. In addition to water quality and habitat benefits, this project will result in greater public access to environmental education opportunities for thousands of Maryland residents.	940
Boy Scout Troop 291	\$ 841	Capital	Montgomery	Hyattstown Mill Tree Planting and Protection	In this project, we will be reforesting a field near the historic Hyattstown Mill Miller's House. We will be planting, protecting and watering about 50 native trees provided by the park. We will also be removing some invasive species. The main objectives of the project are to expand wildlife habitat in the park and absorb more storm water runoff. This project will also have the benefit of improving the view from the nearby Western Piedmont Trail.	50
Audubon Naturalist Society of the Central Atlantic States, Inc.	\$ 1,250	Capital	Montgomery	Meadow-Forest Ecotone Restoration	PROJECT DESCRIPTION My project is an on-the-ground restoration of a meadow-forest ecotone between two meadows at Woodend Nature Sanctuary. The main goals include removing invasive plants in the area, planting native plants that are representative of the ecotone, and establishing a trail which meanders through the ecotone, connecting the two meadows. The benefits of restoring a native plant community at Woodend include increased wildlife habitat, reduced invasive species pressure throughout the property, better erosion control, as well as potential environmental education opportunities.	48

Audubon Naturalist Society of the Central Atlantic States, Inc.	\$	1,250	Capital	Montgomery	Forest-Meadow Ecotone Restoration	PROJECT DESCRIPTION	45
						<p>This project is an ecological restoration of a forest-meadow ecotone area at Woodend Nature Sanctuary, headquarters of the Audubon Naturalist Society in Chevy Chase, Maryland. The restoration area is dominated by invasive species, but through their removal and the planting of native species, it is ripe for improvement. Restoration will have a lasting positive impact through the introduction of more native species and the subsequent creation of higher quality habitat at Woodend.</p>	
LDS Earth Stewardship	\$	25,000	Capital	Montgomery	Public Outreach and Stewardship and Community-Based Restoration for Pleasant View Historic Site	<p>We will improve storm water management by replacing turf with native plants and adding rain barrels to reduce runoff from the Pleasant View Historic Site visible along heavily traveled Route 28. Paths will bring visitors to the site where signs and labeled plants will educate them on native plants, pet waste disposal, and storm water management. Volunteers from multiple community groups will install plants and be trained on storm water management. Residents will attend three presentations on creating native plant habitat and improving storm water management for home properties. Participants will be surveyed and changed behavior reported.</p>	27
Beth Sholom Congregation and Talmud Torah	\$	60,948	Capital	Montgomery	Interfaith Watershed Restoration and Outreach Project	<p>At the crossroads of St. James and Beth Sholom, the Interfaith Watershed and Restoration Outreach Project will: (1) Utilize conservation landscaping design with native plants to replace invasive plants and promote a healthier air and soil environment, (2) Install a rain garden to capture stormwater runoff and pollutants from adjacent impervious surface areas to reduce flooding at the intersection of the properties and support the restoration of the Chesapeake Bay, and (3) Promote understanding of this project through the children's School, the broader faith-based communities at both institutions, and provide a community workshop through Friends of Cabin John Creek.</p>	16

Audubon Naturalist Society of the Central Atlantic States, Inc.	\$	1,238	Capital	Montgomery	Forest Health Restoration Workshop and Planting	<p>PROJECT DESCRIPTION</p> <p>The Forest Health Restoration Workshop will educate the public, college students, and Chesapeake Conservation Corps (CCC) members about forest stewardship while accomplishing a small-scale restoration of a forest patch within the 40-acre Woodend Nature Sanctuary. Using the Chesapeake Bay Foundation's Community Forest Buffer Guide as a template, participants will learn about the ecological benefits of forest restoration, the science of reference ecosystems, and restoration logistics. Students and CCC members will also learn about potential career opportunities in forest restoration. The restored woodland area will improve the ecological condition of Woodend and demonstrate restoration best practices for up to 60,000 annual visitors.</p>	12
Chesapeake Bay Foundation, Inc.	\$	1,041	Capital	Montgomery	Brewing for the Bay	<p>For this CCC Member capstone project, CCC Member Nora Jackson will educate consumers about farm breweries and the choices they can make to support clean water. Nora and CBF staff will host a workshop with a restoration component at a brewery. Through the Buy Fresh Buy Local Chesapeake (BFBLC) program, we will share content, resources, and highlight sustainable breweries. Farm breweries will be added to the BFBLC food guide, and highlighted for their commitment to sustainability and their local community.</p>	12
Meadowside Nature Center/ MNCPPC	\$	1,187	Capital	Montgomery	Compost Demonstration Site	<p>I will be creating a Compost Demonstration Site at Meadowside Nature Center for composting food scraps and animal bedding material. The proposed Compost Demonstration Site will display five different composting systems that visitors can observe and also easily build or set up in their own yard. There will be one large permanent informative sign at the Demonstration Site describing the composting process, its benefits and how it relates to decomposition. In addition, there will be small signs identifying each composting system and handouts explaining how homeowners can make their own composting system.</p>	10

Audubon Naturalist Society of the Central Atlantic States, Inc.	\$ 1,250	Capital	Montgomery	Storm water management for Audubon Naturalist Society pond and trail system	An overarching goal of Audubon Naturalist Society is to control storm water runoff. The steep slope of the sanctuary combined with storm water rushing down the hillsides create erosion of the trails system and sediment buildup in our pond. Berms should be implemented to divert and disperse storm water, thus decreasing the speed and lessening the impact. This project will improve the health of our local Montgomery County watershed and the health of the Chesapeake Bay Watershed. Additionally, working with school groups and our summer camp attendees will educate local families on the benefits of storm water management.	10
Bannockburn Community Club	\$ 48,596	Capital	Montgomery	Community-Based Restoration Implementation and Community Outreach	<p>PROJECT DESCRIPTION</p> <p>The Bannockburn clubhouse is over 100 years old and sits on the highest point of a large 100,844 sq. ft. tiered property surrounded by 22 private homes. The force and amount of stormwater runoff from the large roof surface, driveway, walkway and patio has become a serious erosion and problem impacting our neighbors. Our goal is to redirect and harvest the maximum amount of storm water runoff from the property's impervious areas and keep it from reaching the Cabin John Creek watershed. Our project will implement conservation landscaping, dry wells and rain gardens in a multi . Future projects will include a fifty percent reduction of the grassy areas and replacing it with native plantings that support habitat and manage the flow of stormwater and pollutants locally.</p>	10
Cedar Grove Elementary School	\$ 1,530	Maryland	Montgomery		We will continue learning about Our Neighborhood Our Watershed. Students will install 2 rain barrels to prevent runoff to the blacktop and we will use the water to water our native plants. We would like to plant 5 maple trees for shade in our outdoor classroom. As our field experience we will attend a trip to the Arthur Sherwood Center at Meredith Creek to learn about how humans impact the bay and test the water quality.	25

Bethesda Green	\$	1,500	Maryland	Montgomery		<p>Bethesda Green Leadership Academy draws students from Bethesda-Chevy Chase, Walt Whitman, and Walter Johnson focuses on environmental stewardship via impactful projects and community engagement and encourages cooperative project development and delivery. Students have opportunities to learn from our incubator's next-generation entrepreneurs. Importantly, the program focuses on the development of at least one, significant project.</p> <p>Fall 2017 -- 2 Stream Clean Ups with Rock Creek Conservancy, Tree monitoring at Glen Way Gardens Condominium, Silver Spring, former CBT storm water reduction site (grant ended March 2017)</p> <p>Spring 2018 -- Spring Conservation Projects, student- led projects, location currently unknown and partners currently unknown</p>	20
GreenTrust Alliance Inc.	\$	50,000	Capital	Prince George's	Little Paint Branch Wetland and Stream Buffer Enhancement Project	<p>PROJECT DESCRIPTION</p> <p>Project Description</p> <p>The Little Paint Branch Buffer Enhancement Project seeks to add 5.5 total acres of forested and warm season grass/ pollinator-focused headwater buffer to an existing, contiguous 25 acre stream and wetland restoration project at the USDA Beltsville Agricultural Research Center (BARC) in Beltsville, Prince George's County, Maryland. The proposed buffer enhancement will enhance the functions and values of the previously constructed restoration projects, including one completed under the CBT-MDE nontidal wetland grant program. This site is a significant bird and pollinator "refuge island" within view of I-95 and the Capital Beltway, and is in the headwaters of the Anacostia River's Little Paint Branch, which is highly urbanized and a high priority for restoration activities (Figure 1).</p>	1409
1012053	\$	-	Capital	Prince George's	Magnus, Gary (Oseh Shalom Synagogue) - Urban Tree Canopy	<p>To plant 60 native trees at a nonprofit organization property in Laurel, Maryland.</p>	60

Town of Cheverly	\$ 121,833	Capital	Prince George's	Town of Cheverly -- Boyd Park / 64th Avenue Retrofit Project	The Town of Cheverly, MD is seeking assistance to design, engineer and construct green stormwater infrastructure elements within the municipally-owned Boyd Park, including a 575-foot stretch of 64th Avenue between the intersection with State Street and the bridge spanning Beaverdam Creek. The project area lies within the Lower Beaverdam Creek sub-watershed. The sub-watershed experiences high runoff volumes, trash levels, and pollutant loadings. The project is to design and install four micro-bioretenention practices and plant 30 trees within Boyd Park and the 64th Ave right-of-way. Interpretive signage will also be installed.	30
Maryland National Capital Park and Planning Commission - Patuxent River Park	\$ 1,250	Capital	Prince George's	Planting Native Trees to Mitigate Shoreline Erosion and Coordinate Outreach to Patrons	Patuxent River Park protects over 7,700 acres of land and wildlife along the Patuxent River. Over the last century, sedimentation in the Patuxent River has increased dramatically due to erosion and run-off caused by agriculture and urbanization of surrounding land. In this restoration project, Bald Cypress trees will be planted along shorelines, at campsites, to mitigate erosion. Additionally, signage will be used at three campsites to educate visitors about the site around them and conservation projects at the park. One site will be renovated with a tent pad. This project will restore shorelines and native plants.	20
Charles Herbert Flowers	\$ 5,000	Maryland	Prince George's		Charles Herbert Flowers High School intend to construct the Greenhouse project, expand its Conservation Landscaping project located behind the Charles Herbert Flowers High School close to the child development center and vegetable gardens at the side of the school building . The main objective of the landscape and the gardens is to reduce the surface runoff pollution and provide habitat for wildlife and also provide healthy vegetables that will serve the community. This is an ongoing project that started in April , 2017 and requires funding opportunities for completion. The green house will provide adequate native plant nurseries for the landscape/gardens. The PGDOE partnered with the school and provided 28 trees that were planted around the school's parking lot which was considered to be the most impervious land cover area. The trees require mulch for adequate and consistent maintenance.	27

Elizabeth Seton High School	\$	5,000	Maryland	Prince George's		<p>The LEAD (Learning, Engineering, and Design) Program provides a STEM-focused initiative for young women attending Elizabeth Seton High School. Students participate in a four-year cohort, culminating in a capstone project designed to support students in solving community-based problems.</p> <p>Through the proposed project, students are partnering with the Anacostia Watershed Society to learn stormwater management techniques on Seton's campus in Bladensburg, with seniors developing engineering projects to improve mitigation and prevent erosion on campus. The main objectives for LEAD participants include: 1) Pursuit of secondary education; 2) Pursuit of STEM-related field in college; and 3) Proficiency in 21st century technology skills.</p>	15
ShoreRivers	\$	30,000	Eastern Shore	Queen Anne's	River Friendly Community: Prospect Bay; Track 3: Outreach and Restoration	<p>River Friendly Community: Prospect Bay will implement 10 residential and 3 golf course conservation planting and rain storage practices, implement 3 workshops, and include a bus tour of completed projects in the Prospect Bay Country Club community in Grasonville, MD. This community of 320 residential homes and an 18-hole golf course drains directly to Prospect Bay and Greenwood Creek, tributaries of Eastern Bay in the Chesapeake Bay watershed. These projects will result in direct reductions in nitrogen, phosphorus, and sediment draining from the highly-fertilized golf course that will directly support Queen Anne's County Watershed Implementation Plan goals.</p>	50
Town of Centreville	\$	30,000	Eastern Shore	Queen Anne's	Centreville Wharf Restoration Project	<p>The Town of Centreville's request is for a planting restoration project at the Centreville Wharf Park located on Watson Road, Tax Map: 035H; Grid: 0012; Parcel 1303. Public access to tidal waters is a precious and rare commodity statewide and the Town envisioned a new Wharf Park in this historically valued area to open awareness of this resource and provide a safe and friendly place for all to enjoy. Funds provided through the Chesapeake Bay Trust would provide plantings and grasses to assist in the restoration of this property.</p>	43

ShoreRivers	\$	74,958	Eastern Shore	Queen Anne's	Queen Anne's County Stewards for Streams: Faith Based Conservation	PROJECT DESCRIPTION ShoreRivers proposes the expansion of the successful Stewards for Streams: Faith Based Conservation program to Queen Anne's County. The goal of this two year program is to engage and activate faith organizations of any denomination in environmental education to their congregations, and ultimately environmental stewardship action. Interfaith Partners for the Chesapeake and ShoreRivers will engage a minimum of ten congregations in an environmental engagement activity, and install four restoration projects to reduce stormwater runoff, increase native habitat, and, or reduce impervious surface. As faith organizations are pillars in their communities their stewardship will serve as a call to individual action.	15
St. Mary's College of Maryland	\$	4,500	Southern	Saint Mary's	Biological Control of kudzu, an invasive species, at St. Mary's College of Maryland	Kudzu is an aggressive invasive species found all across the United States, including at St. Mary's College of Maryland (SMCM). Research has shown that goats can be used as an effective biological control agent against kudzu. Consistent with SMCM's sustainability efforts, this student-designed project will employ goats to graze kudzu invading vegetation across the college campus. The goat grazing will eliminate enough foliage to allow college maintenance crews to remove crown roots and cut stems using small amounts of herbicide. Ultimately this project aims to manage an invasive species while educating the community about biological control.	20
Pickering Creek Audubon Center	\$	32,766	Eastern Shore	Talbot	Audubon Watershed Experience for Talbot County High School Teachers and Students	Pickering Creek Audubon Center will connect teachers and students from Talbot County Public Schools (TCPS) to their watershed through the Audubon Watershed Experience (AWE). AWE connects teachers and students to the Chesapeake Bay watershed through STEM learning experiences around the study of bird and fish populations. The project includes substantive teacher professional development, meaningful watershed experiences for all tenth grade students at TCPS concluding with a habitat restoration project developed by students and teachers. Teachers and students will interact with scientists in the restoration field from Audubon, Washington College, the NOAA Environmental Science Training Center, and other local resources.	250

Pickering Creek Audubon Center	\$	29,146	Eastern Shore	Talbot	Native Habitat for Habitat	Pickering Creek Audubon Center will work with homeowners, staff and volunteer leaders from Habitat for Humanity Choptank to increase their knowledge creating and maintaining Bay-friendly yards and how their actions affect their watershed and the Bay. We will work with homeowners to create native plant gardens at homesites in Talbot and Dorchester and engage Habitat volunteers and staff in the process through workshops and onsite consultations with homeowners to achieve goals. We will conclude the project by having two homeowners highlight their project through various means and share the successes and challenges of the project with neighboring Habitat chapters.	50
Tilghman on Chesapeake Community Association	\$	3,969	Eastern Shore	Talbot	Restoration of Island Club Preserve	PROJECT DESCRIPTION Ownership of a non tidal wetland site was transferred to the Tilghman on Chesapeake Community Association in 2019. For the previous 35+ years this site was mowed by the community developer. At its last meeting, the TOCCA Board named the site "Island Club Preserve" with the intention of transforming it to an area populated with native plants appropriate to the site. The objective is to restore the site to a point where it can perform its natural functions and meet the dual objective of providing a community amenity while at the same time providing education benefits to community residents and visitors.	24
ShoreRivers	\$	39,857	Eastern Shore	Talbot	Eastern Shore MWEE Academy	PROJECT DESCRIPTION ShoreRivers, in partnership with University of Maryland Center for Environmental Science (UMCES) Horn Point Laboratory, will host a one-year Eastern Shore MWEE Academy (Academy) to advance interdisciplinary environmental literacy throughout the Eastern Shore of Maryland by training a cohort of fifteen regional teachers in the framework, development, and implementation of Meaningful Watershed Educational Experiences (MWEE) indiscriminate of grade-levels and disciplines.	10

Eastern Shore Community Rowers	\$	977	Eastern Shore	Talbot	ESCR Supplies and Restoration Project	ESCR is an educational rowing organization dedicated to personal and environmental health for our community. We request funds foremost of which includes the cost of a used rowing shell (the core of our mission in putting more people on the water), as well as land clearing and restoration for the area we utilize for our program. The waterfront clearing and restoration is a large part of our commitment to our community program and will include machinery (donated), clearing and disposal (volunteers), as well as restoring the natural habitat of birds and especially indigenous bees needed to propagate native plants.	10
Town of Williamsport	\$	4,917	Western	Washington	Clean Up Day in Williamsport!	The Town of Williamsport will be partnering up with various organizations like the Boy Scouts, Williamsport Rotary Club and much more, on putting on an event "Spring Clean Up" in pursuit of tree planting, riparian zone trash clean up, mulching. Giving the community an opportunity to be engaged in giving back.	50
Highland View Academy	\$	4,750	Maryland	Washington		The project will integrate environmental education and outdoor learning experiences focused on conservation issues of the Chesapeake Bay Watershed. The project's objectives are: to give students authentic real-world experiences that will give meaning and enhance their learning in STEM subjects; give students valuable hands-on activities that will reinforce their learning; give students opportunities to learn environmental stewardship of our natural resources; and give students opportunities to participate in restoration projects on and off campus. Solar City is installing a solar field on campus, and we are planting native trees around it.	20

Maryland Coastal Bays Program	\$ 1,250	Eastern Shore	Worcester	The Development of a Groundwater Monitoring Program at MCBP Restoration Sites	PROJECT DESCRIPTION Sea level rise and saltwater intrusion are a growing threat to Maryland's coastal bays coastlines. To monitor saltwater intrusion and how it is impacting our wetlands, I will be installing 5 piezometers at Grey's Creek Nature Preserve along a transect to investigate and document any changes in salinity gradients. Additionally, MCBP is working towards completing a large-scale restoration site, named Ilia Fehrer Nature Preserve, which historically was a part of the Holly Grove Swamp, and then used as a pine monoculture for logging. Monitoring of this site will include 3 piezometers; at a restored section which will be compared to an unrestored section. I will create a monitoring plan to leave with MCBP so that the piezometers are accurately and sufficiently monitored long term as well as provide a baseline for the dominant vegetation and soil types.	120
Prettyboy Watershed Alliance, Inc.	\$ 47,272	Central		Implementing a behavior change campaign to recruit landowners to have riparian forest buffers planted in the Prettyboy Watershed	Using the behavior change plan developed under our 2014 grant, Prettyboy Watershed Alliance (PWA) seeks to implement and pilot test a riparian forest buffer recruitment strategy, emphasizing a "buffer ambassador" approach to reaching prospective participants. Doubling our recruitment rate, our goal is to recruit up to 27 landowners and plant up to 20 acres of buffers. We will carefully document all aspects of our campaign and share our results widely to enable other watershed organizations to replicate the successful aspects of our approach.	2500
The Nature Conservancy	\$ 1,230	Western		Red Spruce Monitoring and Release Project	PROJECT DESCRIPTION One of the primary goals of the TNC MD/DC Chapter is to increase conifer cover in western MD. For over 20 years, we have planted red spruce seedlings in western MD preserves, a species that provides rare, native habitat for a variety of wildlife and sequesters carbon from the atmosphere. As with any planting project it is important to monitor success, a protocol which I will be laying the foundation for through monitoring plots. I will also be releasing red spruce that are shaded by hardwood canopies, allowing them to accelerate their growth and become functional members of the ecosystem.	3000

Chesapeake Bay Foundation, Inc.	\$ 25,000	Western	Upper Potomac Stream and Wetland Program	CBF proposes to engage volunteers in hands-on restoration projects in Maryland's Upper Potomac watershed (Frederick County and Washington County). The project builds upon our strong history of successful collaboration with farming communities in Maryland to increase landowner adoption of innovative and effective agricultural best management practices that improve water quality, protect and restore wildlife habitat, and foster both community and landowner involvement in the process. Through the engagement of community and student volunteers, CBF will assist farmers in implementing riparian buffers and wetlands. This project also supports the cold water fishery, Trout, and their spawning habitats.	1520
Alliance for the Chesapeake Bay	\$ 5,000	Statewide	Project Clean Stream	Project Clean Stream (PCS) is an annual program organized by the Alliance that empowers thousands of volunteers, at thousands of cleanup sites across all 6 Bay watershed states and DC, with the opportunity to dig, plant, clean up trash, and discover how their everyday decisions can improve the health of the local waterways and the Bay. Through hands-on action and education, PCS develops lasting environmental stewardship by building strong personal connections between individuals and their local waterways.	300
Delaware Maryland Synod ELCA	\$ 18,980	Statewide	Reformation 500 Tree Planting - Part 2	PROJECT DESCRIPTION The Delaware Maryland Synod of the Evangelical Lutheran Church in America seeks to continue its initiative of planting at least 500 trees in 2017 and 2018 to celebrate the 500th anniversary of the Reformation. The trees will be planted on the 170 church properties across the Synod. In advance of the planting effort, we will conduct 5 outreach workshops around the state to provide education to our congregations and project partners on the value of trees to our natural environment and the Chesapeake Bay, how to properly install and maintain trees, and the spiritual connection trees have to our faith.	399

Delaware Maryland Synod ELCA	\$ 16,520	Statewide	Reformation 500 Tree Planting	<p>The Delaware Maryland Synod of the Evangelical Lutheran Church in America seeks to plant 500 trees in 2017 and 2018 to celebrate the 500th anniversary of the Reformation. The trees will be planted on the 170 church properties across the Synod. In advance of the planting effort, we will conduct 5 outreach workshops around the state to provide education to our congregations and project partners on the value of trees to our natural environment and the Chesapeake Bay, how to properly install and maintain trees, and the spiritual connection trees have to our faith.</p>	275
Interfaith Partners for the Chesapeake (IPC)	\$ 29,443	Statewide	Trees for Sacred Places: Cultivating Leaders	<p>This outreach project will build on the success of the Trees for Sacred Places program to engage faith communities in watershed restoration and train congregational leaders to facilitate ongoing green ministries at their faith communities. IPC and its partners will cultivate congregational leaders through in-person and webinar trainings and equip them to lead their congregations through a tree planting project. IPC will provide faith-based training and support to the congregational stewards, and will engage watershed organizations as technical partners for planning support and to lead planting activities.</p>	100
Endangered Species Coalition	\$ 10,000		Quincy Entrance and Woodland Improvement Project	<p>PROJECT DESCRIPTION</p> <p>The Rock Creek Songbirds project is a unique conservation and outreach initiative in Washington DC's Rock Creek National Park. Now in its seventh year, the Songbirds project has made significant progress in cooperation with the National Park Service, restoring habitat and engaging residents of one of the city's most diverse neighborhoods. The next step is the protection and expansion of a woodland adjacent to a neglected major entrance to the park – known informally as “Quincy alley” -- while enhancing public recreation space. The new Songbirds project will see the installation of a natural playground and picnic tables, planting of native trees, and regular programs to make the Quincy alley area a vibrant community and park space.</p>	30

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Environmental Protection and Restoration
Environmental Education

Senate Bill 414

Climate Solutions Now Act of 2021

Date: January 28, 2020

To: Senate Education, Health, and Environmental
Affairs Committee
Senate Budget and Taxation Committee

Position: Support

Contact: Robin Clark, Maryland Staff
Attorney, rclark@cbf.org

Chesapeake Bay Foundation **SUPPORTS** SB 414 as a comprehensive and critical action by the State of Maryland to achieve net-zero greenhouse gas emissions by 2045. The bill will mitigate climate change and improve water quality with a goal to plant 5 million trees through State and private efforts by 2030.

SB 414 is a comprehensive approach reducing greenhouse gas emissions and mitigating the effects of climate change. It addresses emissions from sources including vehicles, buildings, and landfills. It acknowledges the need to accelerate greenhouse gas reductions to prevent catastrophic environmental consequences. It also acknowledges that disadvantaged communities and employees in fossil fuel industries will be disproportionately affected by some of the necessary adaptations to climate change.

Confronting climate change and its effects, including severe storms, warmer temperatures and sea level rise, supports the Chesapeake Bay's recovery

Climate change is affecting the Chesapeake Bay—adding more stress to a system still out of balance. The physical impact has long-lasting implications for its waters, wildlife, and watershed. The number of intense storms is on the rise, increasing soil erosion, sewer overflows, flooding, and polluted runoff. These activities dump nitrogen, phosphorus, and sediment into rivers and the Bay. As a result, our waters experience more dead zones and algal blooms. Larger than average inflows of fresh water threaten oysters and push other Bay-life out of their traditional habitats.

Average annual stream temperatures have increased by 1.1°F (.61°C) in the past six decades in the Chesapeake Bay watershed according to the U.S. Geological Survey (USGS). Warmer waters have a decreased capacity to hold dissolved oxygen, exacerbating the Bay's fish-killing dead zones and contributing to algal blooms. Rising water temperatures are stressing fish from the Bay's iconic striped bass to Pennsylvania's beloved brook trout. Temperature sensitive species are at risk, like eel grass, a food source for migratory waterfowl and important habitat for blue crabs. Like higher inflows of fresh water, significant changes in water temperature displace Bay species, impacting fishing.

Sea-level rise is exacerbated by land subsidence. This combination of processes in the Chesapeake Bay has resulted in approximately one foot of net sea-level rise in the Bay over the past 100 years—a rate nearly twice that of the global historic average. Thousands of acres of environmentally critical tidal wetlands and shorelines are threatened, not to mention susceptible cities and towns. In low-lying areas, storm surges combined with higher sea levels and increasingly erratic storm activity may create a “perfect storm” that will flood thousands of acres. Many of those areas are economically disadvantaged, and the combination of flooding and limited access to emergency facilities—facilities that might themselves be flooded—could be disastrous.

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5 million trees will help the State reach its greenhouse gas reduction goals and help the State meet its Watershed Improvement Plan climate goals

SB 414 sets out a goal for the State to plant 5 million trees by 2030 with 500,000 of those trees to be planted in underserved urban areas of the State. The 5 million tree goal represents a step forward for the State that complements and supports its achievement of the Greenhouse Gas Reduction Plan, the Phase III Watershed Implementation Plan, and needed additional reductions in nitrogen pollution required to address the impacts of climate change in Maryland's Watershed Implementation Plan.

The draft 2019 Greenhouse Gas Reduction Plan includes targets for tree plantings by the State by 2030 that when totaled reach about 5 million trees. However, many of those plantings would simply represent mitigation for trees cut for development or timber. SB 414 would increase the State's net forested acreage to help achieve the State's current goal of 40% reduction by 2030 and the accelerated reduction rate called for in this legislation.

The State's Phase III Watershed Implementation Plan relies in part on tree planting best management practices and other practices that could include tree plantings, offering the potential to plant more than 2 million trees by 2025. As SB 414's goal is tied to 2030, the 5 million tree initiative represents a near continuation of that pace for five additional years. This effort will help support the State's maintenance of water quality, even in the face of changing conditions of climate change.

By 2022 the State will likely need to address an additional 1.1 million pounds of Nitrogen to account for the effects that climate change is already having on the Chesapeake Bay. The 5 million trees envisioned in this legislation could meet up to 40% of the State's responsibility – a strong and proactive contribution. An early investment in trees, as one of the lowest cost methods for reducing nitrogen pollution, could help defray additional costs to the State to address that approaching requirement.

The tree planting goal will be achieved through a combination of state, private, and nonprofit efforts

This legislation includes a goal for the state is not a mandate on the State to plant 5 million trees through its own efforts alone. It is a goal for Maryland to be achieved through State coordination, increased funding to existing State programs, leveraging federal opportunities, and through a new Urban Trees Program.

Achievement of the goal will be a joint effort. State agencies, federal partners and nonprofit efforts will contribute to its success. These include the Department of Natural Resources Forest Service, the Department of Agriculture, the Natural Resources Conservation Service and the Chesapeake Bay Trust. To support the State's work, the legislation directs funding from the Chesapeake and Atlantic Coastal Bays Trust Fund for a 5 million tree coordinator with the Department of Environment, and for technical assistance from the Department of Natural Resource Forestry Service.

The bill also organizes a Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings. The Commission will develop recommendations regarding the establishment of a Maryland-based carbon offset market to support the State's tree-planting goals. Carbon markets could continue tree planting progress even after the expiration of this initiative's eight-year timeline.

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Trees are one of the most cost-effective water quality filters of polluted runoff from agricultural lands and in developed areas

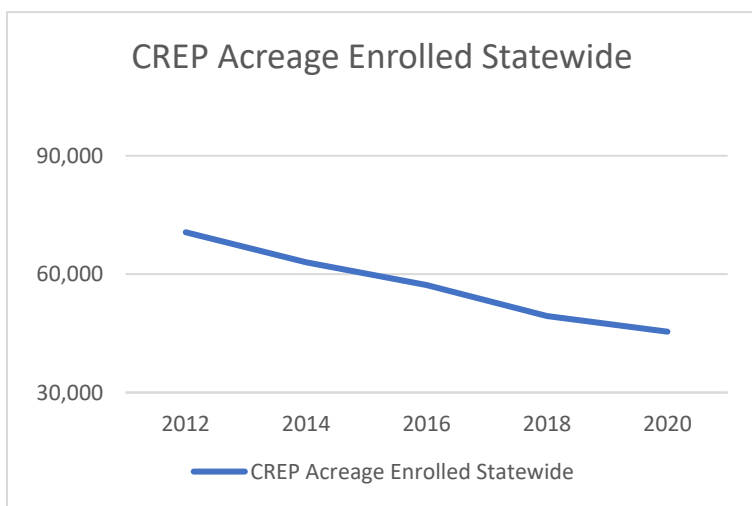
Tree plantings and forest establishment consistently rank at or near the top the list of the most cost-effective pollution reduction practices in urban and rural environments. An agricultural forest buffer is 3 times more cost effective than a soil conservation plan and 6 times more cost effective than a standard cover crop – important practices supported and cost-shared by the state at nearly \$25 million every year. An urban tree canopy planting is comparable in cost to replacing septic systems with public sewer, a practice actively promoted and funded by the Bay Restoration Fund. All of these strategies are key to meeting the state’s pollution reduction goals – but only trees lack adequate financial support and technical assistance.

The trees will be planted on farmland borders, on private property, and in underserved urban areas

Maryland can leverage additional federal funding to support forested buffers on agricultural lands that capture carbon and filter polluted runoff

SB 414 will provide additional funding to the Maryland Department of Agriculture for tree plantings under the federal Conservation Reserve Easement Program and other tree-planting programs on agricultural land. The legislation will also allow the Department the flexibility to increase the signing bonus for enrolling their property in 10-15-year easements with forested buffers in the Conservation Reserve Easement Program from up to \$250 per acre to up to \$1000 per acre.

The Conservation Reserve Easement Program currently represents a missed opportunity for the State to leverage federal lease payments to farmers to increase Maryland’s forested buffers. The program’s terms allow the State to enroll up to 100,000



acres, but acreage in the program has been dropping in the past ten year and now totals less than 50,000 acres.

Year	Acreage enrolled
2012	70,613 acres
2014	62,962 acres
2016	57,214 acres
2018	49,368 acres
2020	45,421 acres

This bill seeks to boost enrollment in CREP and, alternatively, support other similar tree plantings programs through the Department of Agriculture with \$2.5 million from the Bay Restoration Fund. The use of the Bay Restoration Fund is more than warranted here as forest buffers represent one of the most cost-effective methods of improving water quality. On a typical forest buffer easement, 200

trees are planted per acre, so a \$2.5M annual investment over 8 years could yield up to 4 million trees and add 2,500 acres to the Sate’s CREP total a year, and 20,000 acres over the eight-year life of the program.

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Additional funding for the State's existing Department of Natural Resources tree planting programs will help reach public, institutional and private landowners interested in establishing woodlands

SB 414 provides additional funding for the Department of Natural Resources for tree plantings accomplished through the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund, the Mel Noland Woodland Incentives Fund, and other forestry initiatives. The aim is to enhance current programs funding tree plantings on public and private lands, both through additional funding for the programs themselves, and up to 13 additional staff for the Forest Service.

There are several existing tree planting programs run through the Department of Natural Resources Forest Service. The Chesapeake and Atlantic Coastal Bays Trust Fund provides direct grants to local governments, institutions and non-profit organizations for tree plantings. The Woodland Incentive Program provides 65 percent funding for forestry practices on private, non-industrial forestland ownerships 5 - 1,000 acres in size. The Backyard Buffers program provides a free "buffer in a bag" to help get homeowners started in buffering their streamside. The bag includes 20-30 native tree and shrub bare-root seedlings, approximately 1 to 2 feet in height. A mix of various species, the seedlings are well suited to streamside conditions. Through TREE-Mendous MD, residents can use a coupon for discounts on trees on residential properties.

500,000 trees in urban areas will deliver a range of co-benefits to underserved areas of Maryland

The Climate Solutions Now Act directs that at least 500,000 of the 5 million trees named in the statewide goal should be planted in underserved areas of the State. These trees will be planted through the Chesapeake Bay Trust's partnerships with local neighborhood and community groups who apply for tree plantings. Maintenance costs are eligible expenditures under the program and grant from the Trust must include provisions for verification that plantings are being maintained as planned.

The definition of underserved is an urban area as defined by the US Census AND one of the following:

- Public housing, to be added through amendment
- Neighborhoods that were red-lined;
- Census tracts with high unemployment above state average; or
- Census tracts with median incomes representing 75% of the state average.

The most popular species for urban tree plantings currently include Oak (*Quercus* spp.), Red Maple (*Acer rubrum*), and American Sycamore (*Platanus occidentalis*). Trees like these lessen dangerous urban heat-island effects, increase property values, filter harmful airborne particulates that are common in urban environments, and reduce polluted runoff. The state has helped a number of cities and towns make plans to increase urban tree canopy so that neighborhoods have access to these benefits. SB 414 would provide a funding source to help implement these plans.

The 5 million tree goal will be supported by State coordination and technical assistance

The State will ensure progress and organization of state and private efforts toward planting 5 million trees through a 5 million tree program coordinator in the Department of the Environment. The Coordinator will promote, facilitate, and align the State's efforts to achieve the five million tree planting goal. The Coordinator will report annually to the General Assembly's environmental committees with an

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update on progress. The Coordinator will be supported by the Chesapeake and Atlantic Coastal Bay Trust Fund.

The Chesapeake and Atlantic Coastal Bays Trust Fund will also support the addition of 13 contractors for the Department of Natural Resources Forest Service. These positions will help connect willing landowners to planting programs and help plan tree plantings. The estimated cost of the thirteen positions is based on last year's estimate of needs by the Department, at \$1.1M.

A Commission with membership from relevant State agencies and relevant stakeholders including the Maryland Association of Counties and Maryland Municipal League, the Commission on Environmental Justice and Sustainable Communities, statewide environmental advocates, the Farm Bureau, the University of Maryland, and the Maryland Forestry Foundation will help guide the work of the Coordinator and the State. The Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings will report by October 31, 2022 with a plan for tree planting, including guidelines for plantings to maximize carbon sequestration, mitigate urban heat islands, and improve water and air quality. The Commission will also investigate methods for seeking private capital for tree plantings and consider using Water Quality Revolving Loan Funds (WQRLF) to back Environmental Impact Bonds for tree plantings.

Funding dedicated from existing sources, including the Bay Restoration Fund and the Atlantic and Coastal Bays 2010 Trust Fund will support the program and then revert after eight years

SB 414 makes use of existing environmental funds to support the tree plantings goal. As the State is completing upgrades to its major wastewater treatment plants, there is funding available in the Bay Restoration Fund to support other needed water quality practices. This legislation would dedicate \$15 million per year for eight years to tree plantings, including \$2.5 million to the Maryland Department of Agriculture, \$2.5 million to the Department of Natural Resources and \$10 million to the Chesapeake Bay Trust for an Urban Trees Program. Funding for tree planting coordination within the Maryland Department of Environment and additional technical assistance support provided to farmers and landowners through the Maryland Forest Service would be funded by the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund at \$1.25 million annually for eight years.

The trees will be native species, sustainable, and properly maintained

SB 414 states that the 5 million trees will be native, sustainable species and will be maintained. The Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings will determine a list of native species for plantings and a plan for their planting and maintenance by October 31, 2022.

Past practice is an indication of the likely types of species that will be planted. When planting forested buffers for farmland, or afforesting rural lands, the Maryland Department of Agriculture, the Maryland Department of Natural Resources, and partners aim to plant at least ten species for each acre of planting for diversity. Various species of oak, sycamore and maple are common. Sycamores and maples are facultative, thriving in both wet and dry conditions. Various species of oaks are used to match the conditions. Fast growing sycamores have additional qualities, they thrive in stream areas and deer do not

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The Chesapeake Bay Foundation (CBF) is a non-profit environmental education and advocacy organization dedicated to the restoration and protection of the Chesapeake Bay. With 300,000 members and e-subscribers, including over 109,000 in Maryland alone, CBF works to educate the public and to protect the interest of the Bay and its resources.



CHESAPEAKE BAY FOUNDATION

*Environmental Protection and Restoration
Environmental Education*

like to eat them. Researchers with the Department of Natural Resources have found that more than 80% of planted forest buffers thrive despite concerns over wildlife and weeds.¹

In developing urban planting projects, the Chesapeake Bay Trust works closely with neighborhood groups to determine the types of trees planted. The community applying for the planting project will discuss the possibilities, including the height of the tree at maturity, whether the tree will bloom or drop seeds or fruit, the amount of shade, and what options make the most sense considering the locations where the plantings are desired. The most popular species for urban tree plantings include oak, Red Maple, and American Sycamore.

The Chesapeake Bay Trust must include provisions for verification that tree-plantings in underserved urban areas are being implemented and maintained as planned in the grant agreement with the community group receiving the trees. Funding for the Department of Natural Resources tree plantings programs may only be used for tree plantings on private land if the landowner enters into a binding legal agreement to maintain the planted areas in the tree cover for at least 15 years.

Plantings through the Department of Agriculture must be for a term of 10 years or more under the Conservation Reserve Enhancement Program. All maintenance, such as mowing to control woody growth, is the responsibility of the participant and shall be performed according to guidelines that are prepared by Natural Resource Conservation Service and agreed upon in the conservation plan. Participants are responsible for controlling noxious and invasive weeds. All maintenance shall be conducted outside the primary nesting season (April 15 – August 15), except when necessary for spot treatment of weed problems. Approval of the FSA County Committee is required prior to conducting any maintenance during the primary nesting season. Maintenance payments are incorporated into annual rental payments.

CBF urges the Committee's FAVORABLE report on SB 414.

Enclosed:

Chesapeake Bay Trust tree plantings 2015-2020
Underserved urban census track mapping

¹ Koehn, Steven W., Maryland Department of Natural Resources Forest Service, [Riparian Forest Buffer Survival and Success in Maryland](#), April 2001.

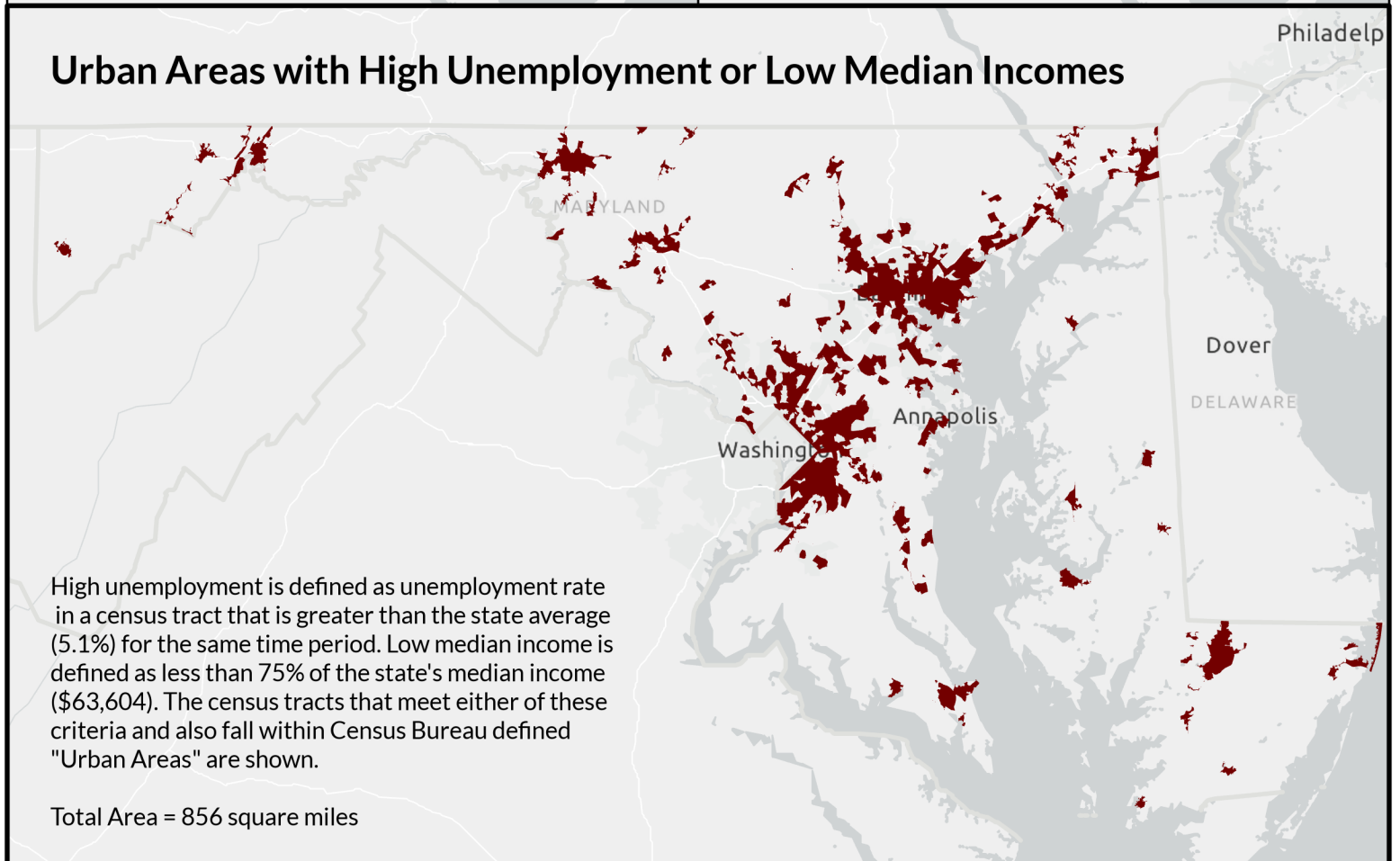
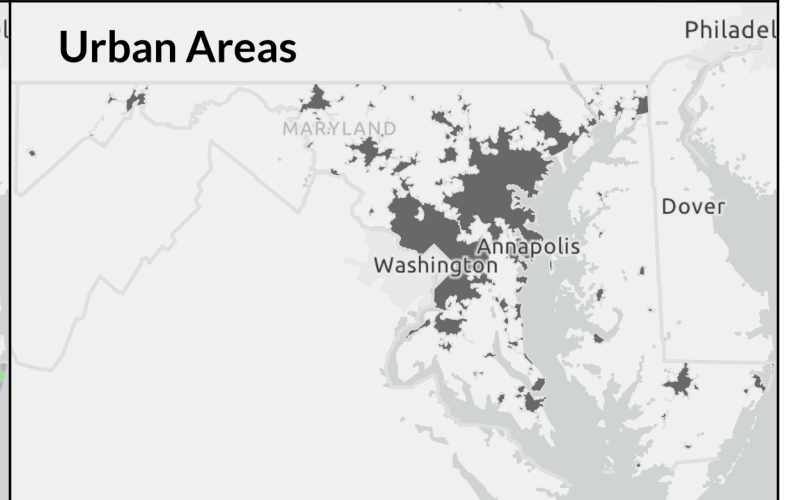
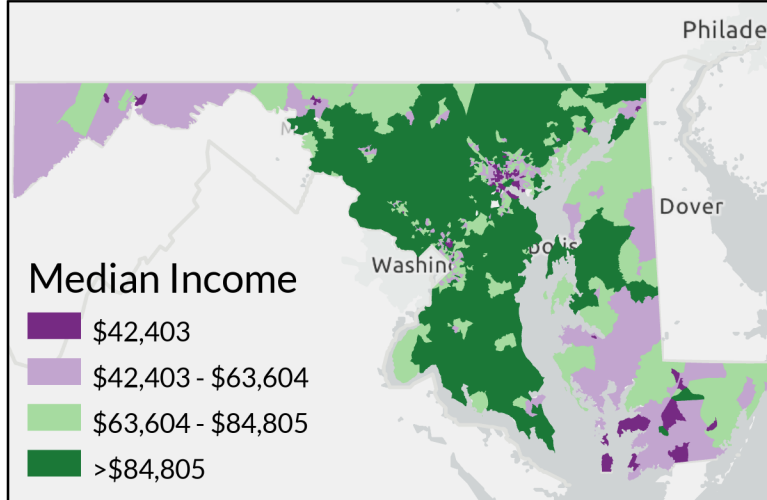
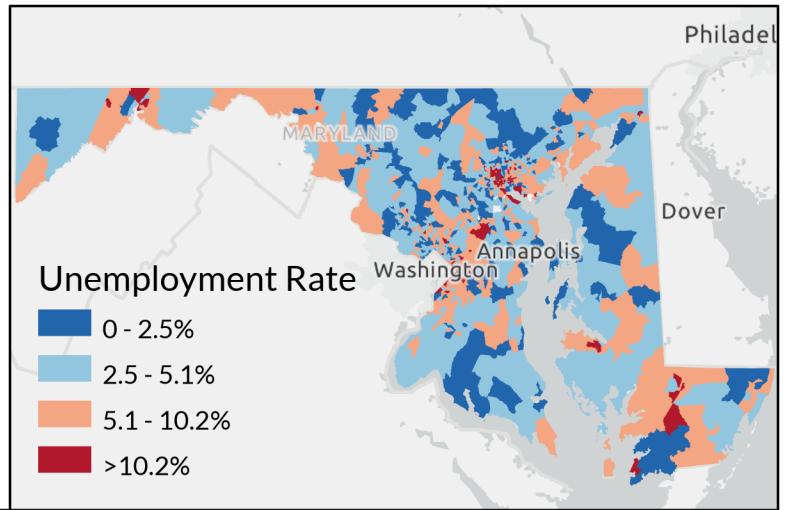
SB 414_CBF_SUP_Underserved Urban Areas.pdf

Uploaded by: Clark, Robin Jessica

Position: FAV

Maryland Urban Areas With High Unemployment or Low Income

(2014 - 2019)



Testimony in SUPPORT of SB 414 (Climate Solutions

Uploaded by: Cook, Kristin

Position: FAV



January 28, 2021

Testimony in SUPPORT of SB 414 – *Climate Solutions Now Act*

Dear Chairman Pinsky and Members of the Committee,

350 Montgomery County supports SB414, the Climate Solutions Now Act of 2021.

Globally, we are at a critical choice point that will determine the course of our future forever. **Just yesterday, Majority Leader Schumer advised President Biden to declare a national emergency for the climate crisis.** (<https://www.msn.com/en-us/news/politics/schumer-suggests-biden-should-declare-climate-emergency/ar-BB1d5D34>).

Climate change is already here and doing catastrophic damage. **There can be no more excuses for failing to take drastic action immediately - including funding.** We cannot afford not to act. And we have the tools, resources and knowledge to do such.

This bill includes:

- Ensuring Maryland is in line with the current climate science by committing us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045
- Restructuring our approach to climate justice by mandating that a percentage of all future climate spending must go to “disadvantaged” communities in terms of climate change, a term to be defined by experts and stakeholders
- Ensuring that labor voices are represented in our planning process, and that jobs benefit those who need them most
- Taking several immediate steps to reduce emissions, such as planting 5 million native trees by 2030, electrifying state vehicles, requiring several net neutral buildings and mandating energy efficiency increases

The effects here in Maryland have been a drastic increase in nuisance flooding, high heat days and storm surges. We believe that Maryland is ready to embrace the new green economy.

We encourage a FAVORABLE report for this essential legislation.

Sincerely and with gratitude,

Jeffrey Weisner
President, Steering Committee
350MOCO@gmail.com, 350MoCo.org

SB414 Testimony_FAV_Preservation Maryland.pdf

Uploaded by: Cowan, Eleanor

Position: FAV

Testimony of Elly Cowan

Director of Advocacy, Preservation Maryland

Before the
Senate Education, Health, and Environmental Affairs Committee
January 28, 2021

Pertaining To: SB414, Climate Solutions Now Act of 2021

Support

On behalf of the staff and Board of Directors of Preservation Maryland, I thank you for the opportunity to provide testimony on the value of smart growth and preservation in Maryland. Through our Smart Growth Maryland program, Preservation Maryland advocates for a more environmentally and economically sustainable future that creates opportunities for all Marylanders through better development patterns.

SUPPORT FOR SENATE BILL 414

Preservation Maryland supports SB414, Climate Solutions Now Act of 2021. This omnibus bill seeks to address the climate change crisis and environmental justice issues that face our state. The legislation will increase Maryland's greenhouse gas reduction requirements to 60% below 2006 levels by 2030 and net neutral by 2045. The bill would also task the Commission on Environmental Justice and Sustainable Communities to determine what percentage of all state funds invested in climate change must go to overburdened communities. The bill creates a work group comprised of IBEW, AFL-CIO, registered apprenticeships, construction laborers, and building tradespeople to make recommendations for workforce development and training for displaced fossil fuel workers. Finally, the bill will enact simple, effective policies to reduce and mitigate emissions including planting 5 million trees by 2030, with 10% to be planted in underserved urban areas of the state.

We are in the midst of a climate change emergency, with the urgency of the crisis growing every year. The opportunity to take the necessary aggressive actions to effectively mitigate the worst effects is dwindling. Maryland's more than 3,000

miles of shoreline and more than 265,000 acres of low-lying land make our state one of the most vulnerable to sea level rise and the effects of increasingly violent weather events, and we are already seeing the devastating effects all across our state. Additionally, this legislation is grounded in the understanding that climate justice is environmental justice, with climate change disproportionately impacting the health, environment, and income of many low-wealth communities and communities of color.

Maryland has an opportunity to demonstrate real leadership in climate policy and show the rest of the country what is possible. The Climate Solutions Now Act puts us on this path. Therefore, I respectfully urge a favorable report of SB414.

Contact: Elly Cowan, Preservation Maryland 443-386-4609

Climate Solutions Now SB 0414 CCAN AF_Testimony_1_

Uploaded by: DeMarco, Jamie

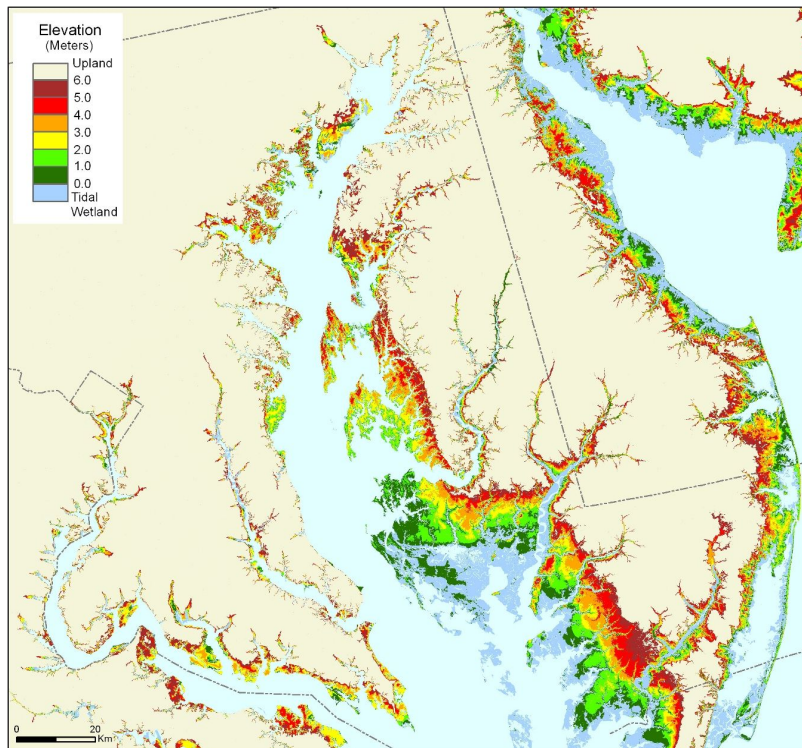
Position: FAV

**Testimony in Support of
Climate Solutions Now Act (SB 0414)
Senate Education, Health, and Environmental Affairs and Budget and Tax Committees
January 28, 2021**

**Jamie DeMarco, Federal and Maryland Policy Director
Chesapeake Climate Action Network Action Fund**

On behalf of the Chesapeake Climate Action Network Action Fund, I strongly urge a favorable report on SB 0414, The Climate Solutions Now Act of 2021.

Lao Tzu said that “If you do not change direction, you may end up where you are heading” and right now, Maryland is heading toward climate disaster. This week [new satellite data](#) found that rates of melting ice around the world match the worst case scenarios from scientific modeling. [In those worst case scenarios](#), the oceans rise *8 feet by 2100*. [The map](#) below shows that if we let this happen, then children born today will live to see Ocean City disappear beneath the waves.



Elevations of Land Close to Sea Level
Elevations are above spring high water, which is the average high tide during new and full moons, and approximately the inland boundary of tidal wetlands. This map is a general graphical representation of elevations in the area depicted, not designed to estimate the precise elevations at specific locations. Due to the use of a variety of data sources, the accuracy of this map varies. Elevations at specific locations are generally within 30 cm above or below the elevation depicted along the Eastern Shore south of Rock Hall and in Baltimore County, 75 cm in Anne Arundel County and the states of Delaware and New Jersey, and 150 cm elsewhere.
Source: J.G. Titus and J.Wang. 2008. "Maps of Lands Close to Sea Level along the Mid-Atlantic Coast". US Environmental Protection Agency.

To avoid this fate, the latest science put forward by the Intergovernmental Panel on Climate Change, which is the world's leading expert on the climate crisis and is composed of the top scientists from 35 countries, says that wealthy states in wealthy nations have to reduce their greenhouse gas emissions 60% by 2030 and have net zero emissions by 2045. Right now, Maryland's greenhouse gas reduction goal is 40% by 2030, and we don't have a binding goal after that. The goal we have set for ourselves is a milestone on the path to climate disaster. Maryland must do its part in the global effort to pull us off the worst case trajectory, and to do that we must pass the Climate Solutions Now Act.

Creating a cleaner economy will help solve climate change, and it will have immediate improvements in our air quality. A recent [Harvard study](#) found that even small increases in exposure to fossil fuel pollution make someone significantly more likely to die from COVID-19.

This legislation passed out of EHEA and B&T in 2020 with bipartisan support, and was on track for passage when COVID-19 ended the legislative session prematurely. It is cross filed in the House as HB 0583 and is introduced by Vice Chair Stein.

The Climate Solutions Now Act of 2021 will change our greenhouse gas reduction goals to be in line with the latest science, a 60% reduction by 2030 and net zero emissions by 2045. It will also require the state to put equity issues front and center when solving the climate crisis, by setting a percentage of all state funds spent to address climate change that must be spent in overburdened communities.

Below is a detailed list of all the provisions in the Climate Solutions Now Act:

Greenhouse Gas Reduction Goals

- Maryland must reduce our greenhouse gas emissions 60% by 2030 and achieve net zero emissions by 2045.
- MDE cannot use highway widening or unproven carbon capture and storage technologies when planning how to achieve these goals.

Environmental Justice:

- The Maryland Commission on Environmental Justice and Sustainable Communities must identify communities disproportionately impacted by the climate crisis and set a percentage of state funds spent on climate that must be spent in those communities.

Worker Justice:

- A new Work Group will convene labor, legislators, the Secretary of Labor's office, climate groups, and renewable energy companies to make policy recommendations for how to best serve fossil fuel workers in Maryland.

Buildings and Energy Efficiency:

- EMPOWER efficiency gains will be 3% every year, increased from 2% a year
- Buildings that receive at least 25% of their funding from the state must be net zero, with some exceptions for schools.
- New buildings with more than 20,000 square feet of roof space must be solar ready.
- A commercial or residential building with more than 25,000 square feet that undergoes a renovation that costs more than 50% of its assessed value, must reduce its energy use 40% below pre-renovation levels or 20% below what would be required for a new building. This regulation may be waived if the building will not recoup the costs through energy savings in 15 years.
- At least 1 new school in each local school system must be zero emission between now and 2030, and new schools that are not net zero must be solar ready.
- New commercial and residential buildings with more than 25,000 square feet will be required to be more energy efficient, and after 2033 they will be required to be net zero.
- Local jurisdictions will be allowed to enact stronger efficiency standards.
- Local jurisdictions will be required to conduct energy life cycle cost estimates for new buildings comparing the costs of using all electricity versus using combustion sources.

State Fleet:

- 50% of new government passenger vehicles must be zero emission starting in 2022, and 100% must be zero emission after 2025.
- All new contracts to purchase buses must be zero emission after 2023.

Tree Planting:

- Between 2022 and 2030 Maryland will plant 5 million trees, with 500,000 of those trees to be planted in urban areas that have been historically redlined or are economically disadvantaged.
- Increase the signing bonus paid to farmers who enroll in the Conservation Reserve Enhancement Program by up to \$1,000 per acre.
- A grant program will be created to fund community groups planting trees in underserved urban areas through the Chesapeake Bay Trust.
- A work group will target the best locations for tree plantings to maximize environmental benefits and determine the best way to leverage private funding.

Funding:

- In any year where the Strategic Energy Investment Fund receives more than \$50 million, then the funds over \$50 million but not more than \$20 million will be spent to implement this bill. To be clear, the bill does not take away from any of the existing SEIF funding percentages, it only uses funds that are above and beyond the usual annual budget for SEIF.
- Every year between 2022 and 2030, \$15 million from the Bay Restoration Fund will be used to enhance existing Department of Natural Resources and Department of Agriculture programs and create a new Urban Tree Planting program. As one of the most cost-effective practices to reduce water pollution, tree plantings are a worthy application of Bay Restoration Funds remaining following the Sattre's completion of upgrades at major wastewater treatment plants.

Miscellaneous:

- At landfills where aircraft observations of methane leakage exceed the ground level emission data by more than 25%, The Department must investigate the difference.
- Community solar projects on rooftops, parking lots, or brownfields that primarily benefit low income households are exempted from personal property tax.
- MDE must calculate the social cost of carbon emissions.

Thank you for your careful consideration, and we urge a favorable report on SB 0414.

CONTACT

Jamie DeMarco, Federal and Maryland Policy Director
Jamie@chesapeakeclimate.org (443) 845-5601

SB414_IndivisibleHoCoMD_FAV_BarbMatheson.pdf

Uploaded by: Deutschmann, Richard

Position: FAV



HB583/SB414 – Climate Solutions Now Act of 2021

Testimony before Senate Education, Health, and Environmental Affairs Committee

January 28, 2021

Position: Favorable

Dear Chairman Pinsky and Members of the Committee:

Indivisible Howard County asks for your strong support for SB 414: The Climate Solutions Now Act. We are grateful for Senator Pinsky's leadership on this urgent and essential environmental legislation.

Maryland is one of the most impacted states by global warming. Rising sea levels are eroding 3000 miles of coastline and flooding over 265,000 acres of low-lying areas. In urban areas greenhouse gases are contributing to increasing rates of asthma, lung disease and cancer. The solutions are not only local but global. Never has international cooperation been more essential to address the climate crises. The Climate Solutions Now Act provides the framework for responsible global citizenship and the beginning of essential solutions to the Climate Crisis by:

- Reducing greenhouse gases 60% by 2030, 100% by 2045 in keeping with scientific evidence forming the bases for the Paris Climate Accords,
- Planting five million trees (10% in underserved communities) to combat greenhouse gases
- Establishing policy for increased energy efficiency in government buildings, transition to electric vehicles and requiring honest and transparent reporting by the State
- Requiring that the Commission on Environmental Justice and Sustainable Communities set standards identifying unfairly burdened communities, implementing forums with affected neighborhoods to identify needs and methods for funding.
- Helping to provide a just transition for fossil fuel workers that have fueled the Industrial Revolution of the past
- Providing funding sources from the Strategic Energy Investment Fund and the Bay Restoration Fund.

The climate crisis is measured in unquestionable scientific data. It is urgent that Maryland not delay in helping its citizens and the global community to find solutions.

Indivisible Howard County urges a favorable report on SB414.

Barb Matheson
Columbia, MD

CSNA2021 Favorable Testimony.pdf

Uploaded by: DUMAIS, BRIG

Position: FAV



Testimony
Climate Solutions Now Act of 2021, SB 0414
Position: FAVORABLE

Members of the Education, Health, and Environmental Affairs Committee,

My name is Brig Dumais and I am a Political organizer with 1199SEIU United Healthcare Workers East. 1199 is the largest healthcare workers union in the country. We represent 10,000 members in hospitals and Long-Term Care facilities across Maryland alone. Our union supports the Climate Solutions Now Act of 2021 because lowering Greenhouse Gas emissions is critical for protecting our planet, a necessary public health measure, and will ensure a just transition to Green Energy.

A recent study from Harvard University found that people who live and work in areas with high levels of air pollution, particularly from burning fossil fuels, are at a significantly higher risk of dying from COVID19. The researchers stated that "The study results underscore the importance of continuing to enforce existing air pollution regulations to protect human health both during and after the COVID-19 crisis."

Furthermore, public health experts agree that as Climate Change continues to warm the planet, we are at even higher risk of severe pandemics in the future. One example of this is that warmer weather lengthens mosquito and tick season-- both insects that have been known to cause humans to contract very serious illnesses. Another public health concern linked to climate change is as permafrost melts at alarming rates, dormant viruses and bacteria awaken and expose people to more illnesses. There have been recent discoveries of the 1918 Spanish Flu, the Bubonic Plague, and Smallpox being released from melting permafrost.

It is clear that we need to reduce our fossil fuel emissions as soon as possible, which requires cooperation between the environmental and labor movements. There need to be safety nets in place for workers in industries with high fossil fuel emissions. This legislation will require a workgroup comprised of unions that represent building trades workers, registered apprenticeship sponsors, and non-union construction laborers to make recommendations for a just transition, including but not limited to workforce development opportunities for re-training displaced workers from high greenhouse gas emitting industries.

The time to act to significantly reduce our greenhouse gas emissions is now. Please vote yes on the Climate Solutions Now Act of 2021 this session for the sake of protecting workers, public health, and our planet.

Respectfully,

Brig Dumais
Political Organizer, 1199SEIU United Healthcare Workers East
443-243-2078, brigette.dumais@1199.org

Legislative Testimony 414.pdf

Uploaded by: Elliott, Richard DeShay

Position: FAV

Legislative Testimony:
SB414

I support Senate Bill 414 to provide new environmental policies to protect the health of our state, our bodies of water, and communities that are already bearing the brunt of climate change.



By Authority: Rich Elliott For Maryland Keanuu Smith-Brown, Campaign Chair Christian Hillian, Treasurer

SB 414 - MoCo - CE (GA 21).pdf

Uploaded by: Elrich, Marc

Position: FAV



OFFICE OF THE COUNTY EXECUTIVE

Marc Elrich
County Executive

January 26, 2021

The Honorable Paul G. Pinsky
Chair, Education, Health, and Environmental Affairs Committee
2 West – Miller Senate Office Building
Annapolis, Maryland 21401

Re: Senate Bill 414 – *Climate Solutions Now Act of 2021*

Dear Chairman Pinsky:

I am writing to express my support for Senate Bill 414. This bill requires the State to reduce greenhouse gas emissions (GHG) by 60% from 2006 levels by 2030 and achieve net-zero GHG by 2045. The bill establishes a Net-Zero School Loan Fund which would assist in the construction of schools that meet net-zero energy requirements and establishes a Commission on Environmental Justice and Sustainable Communities focused on addressing GHG emission in disproportionately affected communities. In addition, the bill establishes a workgroup to address workers affected by the downsizing of the fossil fuels industry, establishes energy conservation requirements for new buildings, and establishes a goal of planting and helping maintain in the State 5,000,000 sustainable trees by 2030.

In 2017, the Montgomery County Council declared a climate emergency calling on all levels of government to “initiate a massive global mobilization to restore a safe climate and build a sustainable economy” and “transform the climate by reducing greenhouse gas emissions by 80% by 2027 and reaching 100% elimination by 2035 and initiate large-scale efforts to remove excess carbon from the atmosphere.” The provisions in this bill will assist the County as it seeks to achieve its target of eliminating greenhouse gas emissions entirely.

For the aforementioned reasons, I support Senate Bill 414 and respectfully request a favorable report.

Sincerely,

Marc Elrich

cc: Members of the Education, Health, and Environmental Affairs Committee

Testimony SB 414_Ferretto 21_0126.pdf

Uploaded by: Ferretto, Lisa

Position: FAV

LISA M. FERRETTO, AIA, LEED AP BD+C, WELL AP, Eco-Districts AP, GGP

January 26, 2021

The Honorable Paul Pinsky
Chair of the Education Health and Environmental Affairs Committee
2 West
Miller Senate Office Building
Annapolis, Maryland 21401

Re: Letter of Support for SB 414, Climate Solutions Now Act of 2021

Dear Chairman Pinsky and members of the EHEA Committee;

Thank you for the opportunity to provide testimony in support of Senate Bill 414, the Climate Solutions Now Act of 2021. Last session, this bill was known as SB926 /HB1425 and passed both senate committees and never made it to the House due to Coronavirus.

I am a sustainability architect and advocate, and am a member of both the AIA, American Institute of Architects, as well as USGBC, the U.S. Green Building Council. I served as a member of the MD Green Building Council (MDGBC) for three years and am now currently a Sustainability Commissioner for Baltimore City.

The Climate Solutions Now Act, is bill that ensures Maryland is a partner and a leader in Sustainability. It acknowledges the interconnected issues and strategies involved in undertaking climate change - buildings, transportation, site, and most importantly, the people. This bill requires a 60% reduction in greenhouse gas emissions by 2030 and net zero emissions by 2045. These goals work towards the targets of the newly reentered Paris Climate Agreement as well as those set by Architecture 2030 and adopted by the AIA.

Building operations account for 28% of the annual global greenhouse gas emissions, and if you consider the impact of building materials and construction, that number jumps to about 40%, ([Architecture 2030](#)). This bill will require all new buildings to be solar ready and energy efficient. The energy efficiency reduction targets step up with each energy code cycle and reaches zero energy by 2033. Major renovations will also have two paths to reduce energy consumption. All new State buildings will be required to be zero energy and each school district will be on a path to have one zero energy school. This aligns with what our neighboring states are also requiring for public projects. To assist with any potential additional cost of reaching zero energy for schools, there will be a no interest net zero school loan paid back with the energy cost savings of the school. This bill also provides provisions for property tax exemptions, updates to the utility energy savings program, and clarifies and restores the intent of the High Performance Building Act by closing the funding loophole and removing unnecessary language.

In addition, SB 414 addresses the climate connections to transportation and site. The transportation sector accounts for 23% of the annual global greenhouse gas emissions and this bill requires that the State's fleet will be 100% zero emissions by 2030. The bill also requires landfill air monitoring, and the planting of five million trees by 2030 with a certain percentage required to be in urban areas.

The Climate Solutions Now Act also recognizes the crucial link with social environment and communities. The bill talks of the social cost of carbon and sets up a Just Transition and Retaining Working Group. It sets new goals for the Commission on Environmental Justice and Sustainable Communities. It requires a report

on jobs and training needed as well as “recommendations to address environmental justice concerns.... [to] build climate equity and resilience within communities disproportionately affected by climate change.”

As a sustainability architect and advocate – I am excited about SB 414, the Climate Solutions Now Act, and the positive impact this bill will have. It ensures that Maryland is doing its part to meet the climate targets needed; holds the State accountable; and protects our State’s finances, the natural environment, and most importantly, the people.

I look forward to the favorable passing of this bill as *Now* is the time to *Act on Climate Solutions*.

Sincerely;

A handwritten signature in black ink, reading "Lisa M. Ferretto". The signature is written in a cursive, flowing style.

Lisa M. Ferretto, AIA, LEED AP BD+C, WELL AP, Eco-Districts AP, GGP

Support SB 0414 Climate Solutions Now.pdf

Uploaded by: Fine, Maureen

Position: FAV

Support SB 0414 Climate Solutions Now
Sen. Pinsky Education, Health, and Environmental Affairs

Dear Senators,

Jan. 26, 2021

My name is Maureen Fine, and I'm a grandmother who **supports SB 0414**. We must act **NOW** to set a framework for dealing with the existential threat of Climate Change. Our children and grandchildren need a future without record flooding, record excessive heat days, and more regular violent storms.

Climate Solutions Now is based on the best science, it addresses environmental justice and labor issues, and offers inexpensive and achievable steps to reduce emissions, such as planting and caring for 5 million native trees by 2030. We owe this effort to our children and grandchildren, and to the planet that gives us our lives. Please support SB 0414!

Thank you,
Maureen Fine
2509 Knighthill Lane
Bowie, MD 20715
301-464-9306

Testimony on Climate Solutions Now2021 JG.pdf

Uploaded by: Gingold, Janet

Position: FAV

January 28, 2021

Testimony in SUPPORT of SB 414 – *Climate Solutions Now Act*

Dear Chairman Pinsky and Members of the Committee,

I support SB414, the Climate Solutions Now Act of 2021.

We just can't keep putting greenhouse gases into the atmosphere faster than natural processes can remove them. The California wildfires and extreme precipitation events here in Maryland in 2020 have shown that climate change is not some abstract threat to the distant future. It is here, now. We urgently need a just transition to clean energy and we need to invest in adaptations to make our communities more resilient. Because climate change won't wait for us to solve our problems of with pandemic, social inequity, economic dislocation, we must address all of these problems simultaneously to build better, more just and sustainable systems for the future.

The Climate Solutions Now act of 2021 will contribute to this effort by

- Ensuring Maryland is in line with the current climate science by committing us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045
- Restructuring our approach to climate justice by mandating that a percentage of all future climate spending must go to "disadvantaged" communities in terms of climate change, a term to be defined by experts and stakeholders
- Ensuring that labor voices are represented in our planning process, and that jobs benefit those who need them most
- Planting 5 million native trees by 2030 to sequester carbon and mitigate heat and flooding
- Electrifying state vehicles
- Increasing energy efficiency in buildings

International experts have urged action on climate with increasing fervor in recent years for good reason: the consequences of staying the course will be highly dangerous. Here in Maryland we have a lot at stake, with nuisance flooding, high heat days and storm surges already regular occurrences. We need to heed those warnings of scientists now and embrace the new green economy. There is no more time to delay on meaningful climate action.

I urge you to send a FAVORABLE report for this essential legislation.

Sincerely

,
Janet Gingold, MD MPH
13107 Whiteholm Drive
Upper Marlboro, MD 20774
301-814-1223
jgingold3@gmail.com

2021 SB0414 Climate Solutions Now testimony.pdf

Uploaded by: Glenn, Shari

Position: FAV



**TESTIMONY TO THE SENATE EDUCATION, HEALTH AND ENVIRONMENT
COMMITTEE**

SB 414 – Climate Solutions Now Act

POSITION: SUPPORT

BY: Lois Hybl & Richard Willson, Co-Presidents

DATE: January 28, 2021

The League of Women Voters is a nonpartisan organization that works to increase understanding of major public policy issues and influence public policy through education and advocacy. Action on climate change is based on the League's position to support comprehensive legislation to control climate change, and support for predominant reliance on renewable resources. We are at a critical point that will determine the course of our future forever.

This bill ensures Maryland will be part of the new green future by:

- Ensuring Maryland is in line with the current climate science by committing us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045
- Restructuring our approach to climate justice by mandating that a percentage of all future climate spending must go to “disadvantaged” communities in terms of climate change, a term to be defined by experts and stakeholders
- Ensuring that labor voices are represented in our planning process, and that jobs benefit those who need them most
- Taking several immediate steps to reduce emissions, such as planting 5 million native trees by 2030, electrifying state vehicles, requiring several net neutral buildings and mandating energy efficiency increases

In Maryland we have a lot at stake, with nuisance flooding, high heat days and storm surges already regular occurrences. There is no more time to delay on meaningful climate action.

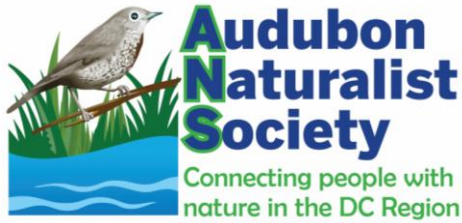
The League of Women Voters Maryland encourages a FAVORABLE report for this essential legislation.



2020_01_26_SB414_Climate Solutions Now Act_ANS_Tes

Uploaded by: Guitarra, Denisse

Position: FAV



January 26, 2021

Written Testimony for [SB0414](#) - Climate Solutions Now Act of 2021

Position: Favorable

Submitted by Denisse Guitarra

Maryland Conservation Advocate, Audubon Naturalist Society (ANS)

Dear Education, Health, and Environmental Affairs Committee,

For 124 years, Audubon Naturalist Society has inspired people to enjoy, learn about and protect nature. We thank the Senate Budget and Taxation Committee for the opportunity to provide testimony for SB414 - Climate Solutions Now Act of 2021.

As we navigate today's public health, social, and economic crises, it is critical to support the passage of SB414 as it is a sustainable well-rounded legislative solution. This legislation will ensure that Maryland meets its greenhouse gas reduction goals by cutting back emissions to 60% by 2030 and ensures that we are on a path to becoming carbon neutral by 2045. It includes policies to reduce carbon emissions from two of the largest sectors of carbon emissions: buildings and transportation. Furthermore, this legislation has the environment in mind as it proposes the best nature-based solution to combat climate change, planting 5 million native sustainable trees by 2030. Trees provide countless ecological services such as flood prevention, carbon sequestration, air and water purification, and reduction of urban heat island effects. These services cannot easily be replaced by built infrastructure, and it will always be much more expensive to try to do so.

Woodend Sanctuary | 8940 Jones Mill Road, Chevy Chase, Maryland 20815 | 301-652-9188

Rust Sanctuary | 802 Childrens Center Road, Leesburg, Virginia 20175 | 703-669-0000

anshome.org

If there is one golden remark about SB414, it would be its priority to place environmental justice at its core. This legislation ensures that vulnerable communities are both empowered and take action on climate change. It will give authority to the Commission on Environmental Justice and Sustainable communities to decide what percent of all state funds invested in climate must be spent in overburdened communities. Additionally, there are provisions requiring that 500,000 of the 5 million trees will be prioritized and planted in underserved urban communities across the state.

ANS supports SB414 this legislation because we have no time to delay on meaningful climate action. People and the environment are already experiencing the effects of climate change from heat waves, flooding, and storm surges. ANS encourage a FAVORABLE report for this essential legislation. On behalf of ANS and our 28,000 members and supporters, we recommend that the Senate Budget and Taxation Committee supports the passage of SB414.

Sincerely,

Denisse Guitarra

MD Conservation Advocate

Audubon Naturalist Society

Climate Solutions Now - Maryland LCV SUPPORT.pdf

Uploaded by: Harbeson, Kristen

Position: FAV



MARYLAND LEAGUE
OF CONSERVATION VOTERS

January 28, 2021

Testimony in SUPPORT of Senate Bill 414: Climate Solutions Now Act

Dear Chairman Pinsky and Members of the Committee:

Maryland League of Conservation Voters

Lynn Heller, Board Chair
Maris St. Cyr, Vice Chair
Michael Davis, Treasurer
Hon. Virginia Clagett
Stuart Clarke
Candace Dodson-Reed
Verna Harrison
Melanie Hartwig-Davis
Ed Hatcher
Hon. Steve Lafferty
Bonnie Norman
Katharine Thomas

Kim Coble
Executive Director

30 West Street
Suite C
Annapolis, MD 21401

410.280.9855
mdlcv.org
marylandconservation.org

Maryland League of Conservation Voters strongly supports SB 414: Climate Solutions Now Act and thanks Senator Pinsky for his leadership on this Maryland LCV and environmental community priority legislation.

Every year the urgency of the climate crisis grows more pressing, and our window for taking the aggressive actions to mitigate against the worst effects grows shorter. It is no secret that Maryland's more than 3,000 miles of shoreline and more than 265,000 acres of low-lying land make our state one of the most vulnerable to sea level rise and the effects of increasingly violent weather events. As the United States re-enters the Paris Climate Accord, it is critical that Maryland shows leadership in climate policy, to demonstrate to the rest of the country what is possible. In 2020, the Maryland General Assembly was unsuccessful in passing any substantive legislation that would take meaningful steps to addressing this critical concern. It is essential that they do so now.

Other submitted testimony describes the full scope of policies proposed by The Climate Solutions Now Act. We would like to highlight three important initiatives that deserve special attention as we seek to reach the emission reduction mandate of 60% by 2030 and net-zero by 2045.

1. Charging the Commission on Environmental Justice and Sustainable Communities with determining what percent of Maryland's climate funding must be spent in overburdened, underserved communities that are disproportionately impacted by climate change emissions;
2. Planting 5 million trees, including 500,000 trees in underserved, urban communities;
3. Purchasing new zero-emission buses as the Maryland fleet turns over. We encourage you to reference our testimony for SB137, which duplicates the provisions outlined in this bill.

These components of the legislation are the most significant equity components of a bill grounded in the understanding that climate justice is environmental justice. Climate change disproportionately impacts many low-wealth communities and communities of color, including impacts to health, local environment, and income. This bill will directly assist these communities in four primary ways:

1. Reduce harmful carbon emissions in order to improve public health;
2. Ensure a portion of state climate funds are spent on environmental justice communities;
3. Help create jobs at all levels;
4. Invest in tree-planting, focusing on underserved urban communities

We strongly urge a favorable report on this essential bill.

Climate Solutions Now Sign-on.pdf

Uploaded by: Harbeson, Kristen

Position: FAV

January 28, 2021

Testimony in SUPPORT of Senate Bill 414: Climate Solutions Now Act

Dear Chairman Pinsky and Members of the Committee:

The undersigned organizations express their strong support for SB 414: Climate Solutions Now Act and thank Senator Pinsky for his leadership on this environmental community priority legislation.

Every year the urgency of the climate crisis grows more pressing, and our window for taking the aggressive actions to mitigate against the worst effects grows shorter. It is no secret that Maryland's more than 3,000 miles of shoreline and more than 265,000 acres of low-lying land make our state one of the most vulnerable to sea level rise and the effects of increasingly violent weather events. As the United States re-enters the Paris Climate Accord, it is critical that Maryland shows leadership in climate policy, to demonstrate to the rest of the country what is possible. The Climate Solutions Now Act puts us on this path, by advancing the following policies:

1. Increasing Maryland's greenhouse gas reduction mandate to 60% by 2030 and net zero by 2045;
2. Charging the Commission on Environmental Justice and Sustainable Communities with determining what percent of Maryland's climate funding must be spent in overburdened, underserved communities that are disproportionately impacted by climate change emissions;
3. Creating a Worker Transition work group that will convene leaders in labor, industry, and policy makers to make recommendations to protect fossil fuel workers;
4. Planting 5 million trees, including 500,000 trees in underserved, urban communities;
5. Increasing our annual energy efficiency gains from 2% a year to 3% a year;
6. Improving air quality monitoring at landfills;
7. Requiring new state buildings to be net neutral and require efficiency gains in large residential and commercial buildings;
8. Purchasing new electric buses as the Maryland fleet turns over;
9. Prohibiting highway widening and unproven carbon capture and storage technology as emissions reduction pathways in our state climate planning;
10. Requiring accurate accounting of methane impacts and the use of best available scientific information in our climate plans.

This legislation is grounded in the understanding that climate justice is environmental justice. Climate change disproportionately impacts many low-wealth communities and communities of

color, including impacts to health, local environment, and income. This bill will directly assist these communities in three primary ways:

1. Reduce harmful carbon emissions in order to improve public health;
2. Ensure a portion of state climate funds are spent on environmental justice communities;
3. Help create jobs at all levels;
4. Invest in tree-planting, focusing on underserved urban communities

We strongly urge a favorable report on this essential bill.

350 Montgomery County	Friends of Sligo Creek
Alliance for Livable Communities	Green Towson Alliance
Arundel Rivers federation	Greenbelt Climate Action Network
Assateague Coastal Trust	GreenGrace (Maryland Episcopal Environmental Partners)
Audubon Naturalist Society	GRID Alternatives Mid-Atlantic
Audubon Society of Central Maryland	Grow Home
Baltimore Blue+Green+Just	Hall's Choice Farm, Ltd
Baltimore Green Space	Howard County Climate Action
Baltimore Peoples Climate Movement	Howard County Conservancy
Baltimore Tree Trust	Indivisible Howard County
Bikemore	Interfaith Partners for the Chesapeake
Black By Nature	Interfaith Power & Light (DC.MD.NoVA)
Blue Water Baltimore	Ji'Aire's Workgroup
Cedar Lane Unitarian Universalist Church	League of Women Voters of Maryland
Environmental Justice Ministry	Maryland Campaign for Environmental Human Rights
CEPA	Maryland Climate XChange
Central Maryland Beekeepers Association	Maryland League of Conservation Voters
Chapman Forest Foundation	Maryland Legislative Coalition
Chesapeake Bay Foundation	Memorial Episcopal Church
Chesapeake Climate Action Network Action Fund	MLC Climate Justice Wing
Chesapeake Physicians for Social Responsibility	MOM's Organic Market
City of Annapolis	Mont Co Faith Alliance for Climate Solutions
Clean Air Prince George's	Multifaith Alliance of Climate Stewards
Cleanwater Linganore, Inc.	Multifaith Alliance of Climate Stewards- Frederick CO
Climate Change Working Group of Frederick County	National Aquarium
Climate Law & Policy Project	Nuclear Information and Resource Service (for a carbon-free, nuclear-free world)
Climate Reality Project Baltimore	Parks and People Foundation
Connecting the Dots	Patapsco Heritage Greenway
Creation Care Action & Advocacy of the Baltimore-Washington Conference of UMC	Pearlstone Center
Defensores de la Cuenca	Potomac Conservancy
Emmanuel United Methodist Church, Laurel	Preservation Maryland
Environmental Justice Ministry Cedar Lane Unitarian Universalist Church	
Friends of Gwynns Falls Leakin Park	
Friends of Quincy Run Watershed	

Prince George's Justice and Advocacy Council,
Archdiocese of Washington
Prince George's County Young Democrats
Public Justice Center
Quaker Voice of Maryland
Rachel Carson Council
Rock Creek Conservancy
Safe Healthy Playing Fields
Safe Skies Maryland
Severn River Association
ShoreRivers
Southern Maryland Fair Skies Coalition
Stony Run Friends Meeting (Quakers)
Strong Future Maryland
Sunrise Movement Howard County
Takoma Park Mobilization Environment Committee
The Biz Center Renewable Energy Incubator
Transition Howard County
Unitarian Universalist Legislative Ministry of
Maryland
Voices MD
Waterkeepers Chesapeake
WISE

Climate Solutions Now.pdf

Uploaded by: Hershfeld, Michelle

Position: FAV

January 28, 2021

Testimony in SUPPORT of SB 414 – *Climate Solutions Now Act*

Dear Chairman Pinsky and Members of the Committee,

I support SB414, the Climate Solutions Now Act of 2021.

Globally, we are at a critical choice point that will determine the course of our future forever. Climate change is already here, and we are the last generation that will be able to course correct towards a livable future for all. However, we have the tools, resources and knowledge to take action right now.

This bill ensures Maryland will be part of the new green future by:

- Ensuring Maryland is in line with the current climate science by committing us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045
- Restructuring our approach to climate justice by mandating that a percentage of all future climate spending must go to “disadvantaged” communities in terms of climate change, a term to be defined by experts and stakeholders
- Ensuring that labor voices are represented in our planning process, and that jobs benefit those who need them most
- Taking several immediate steps to reduce emissions, such as planting 5 million native trees by 2030, electrifying state vehicles, requiring several net neutral buildings and mandating energy efficiency increases

I have always grown up being told climate change will affect me and my future. In the past few years I have noticed drastic change in weather, the Old Ellicott City floods, mild winters, and extremely hot summer days. This will only continue to progress unless action is taken. We have a plan and we have solutions all we need now is your support.

International experts have urged action on climate with increasing fervor in recent years for good reason: the consequences of staying the course will be highly dangerous. Here in Maryland we have a lot at stake, with nuisance flooding, high heat days and storm surges already regular occurrences. We have an opportunity to listen to scientists now while signaling to the nation that Maryland is ready to embrace the new green economy. There is no more time to delay on meaningful climate action.

I encourage a FAVORABLE report for this essential legislation.

Signed,
Michelle Hershfeld

SB 0414 Chesapeake Bay Commission Written Testimon

Uploaded by: Hoffman, Mark

Position: FAV



CHESAPEAKE BAY COMMISSION

Policy for the Bay • www.chesbay.us

Written Testimony

Bill Number/Title: SB 414 / Climate Solutions Now Act of 2021
Committee: Education, Health and Environmental Affairs
Hearing: January 28, 2021
Position: Support

Background

The Chesapeake Bay Commission is a tri-state legislative commission created by law in Maryland, Pennsylvania and Virginia to advise the members of the three general assemblies on matters of watershed-wide concern. Its fundamental purpose is to assist each assembly to develop legislation and policies that foster the collaborative and practical restoration of the Chesapeake Bay and its watershed.

Position

The Commission supports SB 414. The impacts of climate change continue to increase the challenge of restoring the Chesapeake Bay Watershed. The Chesapeake Bay Program models currently project that nitrogen loading will increase Bay-wide by approximately 6 million pounds annually due to climate change looking out to the TMDL deadline in 2025. For Maryland, this translates to 1.142 million pounds *above and beyond* the 6.2-million-pound reduction already required to achieve clean water. These impacts are projected to increase over time post-2025. Each jurisdiction must work to incorporate additional conservation practices into their two-year workplans to address the additive loads due to climate change.

SB 414 also includes specific provisions to increase urban and rural tree planting. Reforestation, forest buffers and urban tree canopy all offer cost-effective opportunities to reduce nutrient and sediment pollution for each sector. Forested landscapes produce the lowest nutrient loading of any cover type within the Bay watershed; by increasing the number of trees and forest cover, dual benefits can be achieved – carbon sequestration and the reduction of nutrient loading to the Bay.

sb414, climate solutions now 1-28-'21.pdf

Uploaded by: Hudson, Lee

Position: FAV



Delaware-Maryland Synod
Evangelical Lutheran Church in America
God's work. Our hands.

Testimony prepared for the
Education, Health, and Environmental Affairs Committee
on
Senate Bill 414
January 28, 2021
Position: **Favorable**

Mr. Chairman and members of the Committee, thank you for the opportunity to testify on behalf of wise stewardship of resources with sustainable energy consumption. I am Lee Hudson, assistant to the bishop for public policy in the Delaware-Maryland Synod, Evangelical Lutheran Church in America. We are a faith community of congregations in three ELCA synods, located in every part of the State.

Sustainability is a measurable standard we advocate for energy production and consumption, within our community and in public life. We have supported expanding renewable sources in the Maryland energy portfolio since 2002. Time has validated that stance. Renewables are competitive on cost, less expensive if environmental detriment is calculated, and not subject to commodity price pressures. And they do not produce greenhouse gas.

Greenhouse gas emissions are surpassing what the known environment can tolerate. Climate, food, safety, civic and economic life are at risk, here and around the globe. The human community must now rapidly employ policy instruments for diminishing the catastrophic. The cost of attending to climate disasters already exceeds the cost of a new energy regime. That calculation only gets worse from now on.

We support accelerating the rate at which renewables are brought to the Maryland energy market, as we have done previously. Increasing renewables lowers energy cost by scaling new generation capacity. It may slow rapid earth warming now altering weather, the seas, and geography. Consumers, communities, and earth's climate all benefit.

We support Senate Bill 414 because it accelerates the measure and the rate at which these sources will count in Maryland's energy market. And we implore your favorable report.

Thank you for this hearing.

Lee Hudson

Climate Solutions Now Act, SB 414.pdf

Uploaded by: Hummel, Lani

Position: FAV

We Need to Speak for the Trees

I am writing in support of the Climate Solutions Now Act of 2021, SB 414.

I bought my house for the trees...those in my yard, my neighborhood, my community, and along Forest Drive. Tall, stately, old-growth trees that made me feel as if I was living in a nature preserve. Trees that would enable me to realize a life-long dream of hosting my own bird sanctuary.

For several years, I lived the peaceful existence I had dreamed of in the cool shade of trees with a growing population of birds filling the air with their songs. At the height of the spring season, I deployed 17 bird feeders to accommodate my avian visitors.

Then, the developers arrived. Swaths of forests were replaced by one building after another. It soon became apparent that Forest Drive is destined to become a stretch of unending concrete, glass, and asphalt, changing the character of my neighborhood forever. To add insult to injury, the developers made no efforts to preserve any trees on the building lots and planted very few trees to replace the many that they removed.

With such a massive loss of habitat, my bird sanctuary has become an avian ghost town. This year, I deployed only 2 bird feeders. The bird songs I love so much have been replaced by traffic noise.

More than habitat for birds, trees are one of the most effective and least expensive means of fighting climate change. We cannot continue to remove them with impunity. Science shows us that the pace of climate change is accelerating. In order to mitigate its worst effects, we need to plant many more trees than are destroyed each year. And, we have to act NOW to have any hope of not passing along a world of nightmares to our children and grandchildren.

Lani Hummel

Annapolis

SB 414 Climate Solutions Now Act of 2021 (Favorabl

Uploaded by: Kerr, Cait

Position: FAV

Thursday January 28, 2021

TO: Paul Pinsky, Chair of Senate Education, Health and Environmental Affairs Committee; Guy Guzzone, Chair of Senate Budget and Taxation Committee; and Committee Members

FROM: Caitlin Kerr, The Nature Conservancy, Conservation & Climate Policy Analyst

POSITION: Support SB 414 Climate Solutions Now Act of 2021

The Nature Conservancy (the Conservancy) supports SB 414 offered by Senator Pinsky. SB 414 seeks to increase Maryland's emissions reduction goals to 60% by 2030 and sets the target of a carbon-neutral economy by 2045, presenting us with an opportunity to once again demonstrate our state's ambition and strong commitment when it comes to approaching the threat of climate change head-on. The legislation also creates a goal of planting 5 million native sustainable trees by 2030, with 500,000 of those trees to be planted in urban areas on the frontlines of climate change and impacted by systemic injustices. This goal will be accomplished through state agency programs and nonprofit efforts. Co-benefits of trees, forests, and canopy include economically valuable services like carbon dioxide sequestration, water filtration, flood mitigation, recreational spaces, heat reduction, air quality improvement, and wildlife habitat.

Nature is the climate solution hiding in plain sight. By sustainably managing, restoring and protecting forests and other lands worldwide, we can cost-effectively capture up to 11 billion metric tons of greenhouse gas (CO₂e) emissions globally per year by 2030. These natural climate solutions (NCS) also protect biodiversity, restore watersheds, and provide sustainable livelihoods. The Conservancy led the foundational science on NCS¹ and we know that intense collaboration between frontline communities, governments, large and small non-governmental organizations (NGOs), and corporations is essential to achieve the transformational change that is necessary to combat climate change. The Conservancy has shown that natural climate solutions, including sustainably managing, restoring, and protecting forests and other lands, can provide a third of the global solution to climate change by 2030.²

In addition to carbon sequestration, urban trees also provide important public health benefits. In Baltimore City, temperatures reach up to 21°F hotter than in surrounding rural areas. By 2050, the city is estimated to experience five times as many dangerous heat days with a heat index over 105°F as we did at the start of the century. These impacts are not limited to cities; across Maryland, we average ten days a year when heat exceeds dangerous levels. This number is predicted to rise to forty days annually by 2050. Extreme heat can worsen existing illnesses, posing severe threats to vulnerable individuals. It can also cause mental and physical stress, heat-related illnesses, and sometimes deaths. Shaded surfaces can be up to 20-45°F cooler than peak temperatures of unshaded surfaces. Evaporation and transpiration processes in plants can reduce peak temperatures in the area by 2-9°F.

The Conservancy commends Senator Pinsky and the co-sponsors for continuing to raise the bar for Maryland's climate commitments and advancing natural climate solutions that can provide valuable environmental, economic, and public health co-benefits for years to come.

Therefore, we urge a favorable report on SB 414.

¹ <https://www.pnas.org/content/114/44/11645>

² <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/natural-climate-solutions/>

SB 414 Testimony.pdf

Uploaded by: Kohn, Alexander

Position: FAV

Testimony in Support of SB414 – Climate Solutions Now Act of 2021

To: Senator Paul Pinsky, Chair, and Members of the Education, Health, and Environmental Affairs Committee

From: Alex Kohn, Columbia, MD, 21045 (alex.kohn76@gmail.com)

Date: January 26, 2021

Please support SB414. The many steps that this bill takes are critical to Maryland's future. This bill will help to slow the impacts of climate change and save the lives of many throughout the state. The goals outlined in this bill will be challenging to reach, but they are both achievable and necessary. I greatly appreciate that this bill requires considerations for all green-house gasses including methane which is often overlooked. This will help to ensure true energy sustainability in Maryland, not only carbon neutrality.

I am 18 years old, and I am very concerned for what the future of the world will look like. Maryland has a lot to lose from climate change and it is only a matter of time before there is a crisis on our hands. I work in Historic Ellicott City where increased storm intensity and flooding over the last few years has taken lives and destroyed buildings. Please pass this bill to provide the possibility of a future for the residents of this state.

Please support SB 414. Thank you,

Alex Kohn

IPL Testimony on SB 414 - Climate Solutions Now Ac

Uploaded by: Lacock-Nisly, Jonathan

Position: FAV



Interfaith Power & Light (DC,MD.NoVA)

100 Allison St NW

Washington, DC 20011

202-709-7641 • program@qwipl.org

Jonathan Lacock-Nisly, Director of Faithful Advocacy

January 26, 2021

Testimony on SB 414 –

SB 414: Climate Solutions Now Act

Education, Health, and Environment Affairs Committee

Position: Favorable

Interfaith Power & Light (DC,MD.NoVA) supports SB 414.

Congregations of many faith traditions all across Maryland are taking action on the climate crisis because we are heartsick knowing that our climate pollution is hurting our neighbors, here and throughout the world.

It is simply not just that all of us, and especially communities of color, our elderly, and our young people, have paid the price for that pollution. Marylanders have paid for dirty energy with our health. We've paid when a disrupted climate exacerbates storms and brings flooding, like the *two* "hundred-year" floods that hit Ellicott City in the past five years.

That's why people of faith are taking action—installing solar panels on houses of worship and buying clean energy for our sacred spaces, planting trees in our communities to clean our air and absorb climate pollution, and changing our transportation habits by riding public transit and buying electric vehicles.

In houses of worship across the state, clergy and lay leaders are sharing the message that another world is possible. The Climate Solutions Now Act is a way, here in Maryland, to take a meaningful step towards making that vision more real.

We can set a timeline for getting Maryland to net-zero climate pollution. We can plant 5 million trees, including 500,000 in overburdened urban neighborhoods. We can electrify our state vehicles, cleaning our air and reducing the number of childhood asthma attacks. And we can ensure that all of our communities benefit from and have a say in this process.

Maryland's faith communities are acting for our common home, for our neighbors, and for a clean energy economy. We call on our legislators to do the same.

We urge the committee to give SB 414 a favorable report.



The Episcopal Diocese of Maryland, led by the Rt Rev. Eugene Taylor Sutton, gathered in Annapolis to advocate for a previous version of the Climate Solutions Now Act in early 2020.



People of faith from across Maryland gathered in Howard County to learn and take action on the Climate Solutions Now Act's previous iteration in January 2020.



People of faith participated in the Chesapeake Climate Action Network's "polar plunge" at National Harbor in early 2020 to support the Climate Solutions Now Act's previous iteration and its goal of keeping winter cold.



Marylanders gathered at Asbury United Methodist Church in Annapolis to advocate for the Climate Solutions Now Act's previous iteration in early 2020.



Hundreds of Marylanders, including faith communities, gathered in College Park in support of the Climate Solutions Now Act's previous iteration in December 2019. IPL-DMV's Director Joelle Novey called all those present to turn to a neighbor and share "Why does climate change matter to you?"

SB414_ClimateSolutionAct.pdf

Uploaded by: Lewis, Bob

Position: FAV

Joe Anderson
President

January 25, 2021

Patricia Samford
Vice President

Subject: SB0414: Climate Solutions Now Act of 2021

Larry O'Brien
Secretary

Education, Health, and Environmental Affairs Committee - January 28th, 2021

Chandler Wyatt
Treasurer

FAVORABLE

Melina Cavathas
Director

Dear Senator Pinsky and members of the Committee,

Captain Will Gates
Director

Without reservation, we strongly request a favorable finding for SB0414, the Climate Solutions Now Act of 2021.

John Giusti
Director

The St. Mary's River Watershed Association is actively fighting for our Chesapeake Bay in three measureable ways—increasing the acreage of vibrant oyster habitat, installing storm water control devices on residential and small business properties, and installing riparian buffers and natural shoreline protections. These activities give us a firsthand look at how climate change is already impacting our Chesapeake Bay and its tributaries.

Emily Jackson
Director

Captain Paul Kellam
Director

David Lewis
Director

Water temperature, especially in July and August are reaching heights rarely seen decades ago. In the St. Mary's River the past few years, water temperature has risen to 31 degrees Celsius. These high temperatures, a direct result of climate change, are negatively impacting aquatic life—oysters do not breed successfully and fish are moving to cooler waters further north. Warmer waters are causing even small algae blooms to expand rapidly and cause larger and more persistent dead zones.

Bob Paul
Director

John Spinicchia
Director

Elaine Szymkowiak
Director

Shorelines are also being impacted, especially tidal marsh areas. Back 25 or more years ago, the ten-acre marsh in front of our field office was lush with marshmallow that bloomed every May. Today the area has no mallow living there. Sea level rise and persistent higher tides have killed all the woody plants such as mallow. The marsh now is dominated by grasses. Even small sea level rise has already changed our environment depriving us of the beautiful soft pink blossoms that permeated the marsh years ago. Sure other negative impacts are occurring that remain unseen at this time.

These are the local impacts of climate change on our river. Greater impacts are being felt elsewhere and none is more important and the need to address more pressing that the loss of our trees. Trees are the source of oxygen for us to breathe and they cleanse the air of pollutants. SB0414 is the first step in reversing the loss of our forests and tree canopies.

It is imperative that Maryland begin to take very bold steps to reverse climate change. The economics of waiting to react is a real danger—it will cost more over time the longer we wait to do something to arrest climate warming.

SB0414 is a necessary step to continue Maryland's pursuit of zero carbon emissions, which is the key to saving our waterways from overheating and our marshes from being inundated. We request the Committee return a FAVORABLE report on SB0414.

Respectfully,

A handwritten signature in black ink, appearing to read "Joseph Anderson". The signature is fluid and cursive, with the first name "Joseph" being more prominent than the last name "Anderson".

Joseph Anderson, president

Takoma Park - SB 414 FAV - Climate Solutions Now.p

Uploaded by: Ludlow, Suzanne

Position: FAV



CITY OF TAKOMA PARK, MARYLAND

**SB 414
Support**

Senate Education, Health and Environmental Affairs Committee

January 28, 2021 11am

SB 414 (HB583) Climate Solutions Act of 2021

City Contact: Cindy Dyballa, Ward 2 City Council Member

CindyD@takomaparkmd.gov

The City of Takoma Park supports the goals and intent of Senate Bill 414, and urges favorable consideration.

This bill would accelerate the state's overall greenhouse gas (GHG) emissions reduction goal from 40% to 60% by 2030, with a goal of net zero GHG emissions by 2045. Provisions address a wide range of state policies and actions to improve energy efficiency and solar-ready requirements for new and renovated buildings, increase carbon sequestration and improve climate resiliency through tree plantings statewide, green the state vehicle fleet, and address climate justice and job impacts, among other provisions.

Throughout Maryland, we can see that our climate statewide is dramatically and rapidly changing with devastating consequences, and that greenhouse gas emissions must be dramatically reduced in the very short term to address this. We must accelerate and expand efforts on the part of all levels of government, and the state of Maryland must take an aggressive leadership role and lead by example. Impacts statewide include more severe and frequent storms, greater rainfall, increased flooding, more frequent and extreme heat waves, sea level rise along our extensive coasts, and more. One significant impact in Takoma Park is more stormwater runoff more often, challenging the capacity of our older infrastructure. There's no time to waste.

Takoma Park has been a leader among Maryland communities in responding to the challenges of climate change and in reducing greenhouse gas emissions through our many local policies and actions. In 2019 the City declared a climate emergency and set a goal of net zero GHG emissions by 2035. Last year the City adopted a Climate Emergency Response Framework to move aggressively to implement that goal. We recognized the need for greater resiliency to address the impacts we are already experiencing, through our new urban forest policies. Our City is publicly committed to action on climate change through the Global Covenant of Mayors for Climate and Energy, the Paris Climate Agreement and the Sierra Club 100% renewable energy pledge.

To truly fulfill our City's commitments, and dramatically reduce our GHG emissions, we need strong state leadership and action to support us.

In sum, the City of Takoma Park supports the goals and intent of this bill, and encourages a favorable vote.

WISE testimony - CSN Act (2).pdf

Uploaded by: O'Connor, Monica

Position: FAV



January 28, 2021

Testimony in SUPPORT of SB 414 – *Climate Solutions Now Act*

Dear Chairman Pinsky and Members of the Committee,

WISE supports SB414, the Climate Solutions Now Act of 2021.

Globally, we are at a critical choice point that will determine the course of our future forever. Climate change is already here, and we are the last generation that will be able to course correct towards a livable future for all. However, we have the tools, resources and knowledge to take action right now.

This bill ensures Maryland will be part of the new green future by:

- Ensuring Maryland is in line with the current climate science by committing us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045
- Restructuring our approach to climate justice by mandating that a percentage of all future climate spending must go to “disadvantaged” communities in terms of climate change, a term to be defined by experts and stakeholders
- Ensuring that labor voices are represented in our planning process, and that jobs benefit those who need them most
- Taking several immediate steps to reduce emissions, such as planting 5 million native trees by 2030, electrifying state vehicles, requiring several net neutral buildings and mandating energy efficiency increases

We are a group of over 500 women in Anne Arundel County. We are seeing our children’s future jeopardized by the crisis unfolding before us. The science of climate change is clear – as is our lived experience. Rising waters in the County, sunny day flooding, high temperature in the summer and erratic weather is now commonplace. We believe the science and anticipate that our elected officials will act with the necessary urgency this moment calls for. We cannot waste more time.

International experts have urged action on climate with increasing fervor in recent years for good reason: the consequences of staying the course will be highly dangerous. Here in Maryland, we have a lot at stake, with nuisance flooding, high heat days and storm surges already regular occurrences. We have an opportunity to listen to scientists now while signaling to the nation that Maryland is ready to embrace the new green economy. There is no more time to delay on meaningful climate action.

We encourage a FAVORABLE report for this essential legislation.

Signed,
Monica O'Connor
WISE – Legislative Liaison
Mdoconnor17@gmail.com

AIA MD SB 0414 Climate Solutions Now - Support 01.

Uploaded by: Parts, Chris

Position: FAV



AIA
Maryland

Promoting Maryland Architecture Since 1965

26 January 2021

The Honorable Paul Pinsky
Chair of the Education Health and Environmental Affairs Committee
2 West
Miller Senate Office Building
Annapolis, Maryland 21401

Re: Letter of Support for SB 0441
Climate Solutions Now Act of 2021

Dear Chairman Pinsky and members of the Education Health and Environmental Affairs Committee:

On behalf of AIA Maryland and the nearly 2,000 Architects we represent, we ask for your support of the Climate Solutions Now act of 2021. With 40% of US energy consumed by buildings, architects play a key role in helping us significantly reduce CO2 emissions. Since 2009 many architects have opted into an AIA 2030 challenge, a program focused on tracking baseline and predicted energy use, aimed at moving us toward net zero carbon emissions by 2030. This bill not only helps Maryland funded projects to lead by example, pushing state funded projects to be net zero and solar ready, but it also moves the energy conservation requirements for the state to take all new commercial projects toward net zero energy by 2033 by pushing us a little ahead of building code regulations.

We are particularly pleased with the broad perspective of the Climate Solutions Now Act, impacting interconnected issues of health, our natural environments, transportation, site development and buildings. All these elements contribute to the health and well-being of Maryland residents and when looked at broadly like this, they may collectively have a much greater impact than incremental changes that impact singular components that contribute to climate change.

With this bill, the publicly funded projects move significantly forward in reducing long term operational costs for energy. In the next 8 years, at least one new school in every jurisdiction would be built to meet net zero energy reduction goals. Additionally, all new school projects would have their roofs designed, infrastructure planned and space allocated to be solar ready. This bill also provides a no interest net zero school loan paid back with the energy cost savings of the school to assist with any potential additional cost of reaching zero energy for schools. Schools are projects that are well suited based on floor to roof area to be zero energy structures and some may have the capacity to be net positive, feeding electricity back into the grid. While this

The American Institute of Architects

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www.aiaMaryland.org

is important from an operational cost standpoint, this is also an important means of educating our students to help them understand efforts we are making to slow down the effects of climate change and lessons within the buildings can be brought into the classroom. Since 20% of our state population is in public schools every day, this has a broad impact on our residents.

The energy conservation steps of this goal apply to new commercial construction and they largely move the goal line one step closer for each code cycle. Energy codes are reviewed and updated every three years and using the 2018 energy code as a baseline, the incremental steps increase efficiency by 30% by 2026, 40% by 2029 and 60% by 2032, taking us to net zero energy by 2033. This just moves the cycle in the direction it is heading a few years in advance of when they would be adopted. Additionally, one way to significantly reduce the carbon footprint is to work with buildings we already have. This bill applies to major renovation projects and changes in a building use. There can be aspects of an existing structure that are limiting, so the bill provides two paths to reduce energy consumption, either a 40% reduction in average energy use, or a 20% improvement over code requirements for a new building. These common-sense measures will move the needle toward lowering energy demand and creating a healthier environment in which we live.

The Climate Solutions Now Act puts Maryland on a path to slow the impact of climate change. The measures within the bill will move us toward healthier, more efficient communities and structures in which we live work and play. The reduced energy demand provides long term savings on operational costs as most buildings provide 50+ years or more of service. We ask for your support of SB0414 to help have an impact on climate change now.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Parts', with a long horizontal line extending to the right.

Chris Parts, AIA
Director, Past President, AIA Maryland

cc:

Education, Health and Environmental Affairs Committee:

Cheryl C. Kagan, Vice Chair

Mary Beth Carozza

Arthur Ellis

Jason Gallion

Kate Fry Hester

Clarence Lam

Obie Patterson

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Mary Washington

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SB 414 - Climate Solutions Now Act.pdf

Uploaded by: Peterson, Matt

Position: FAV

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Beth Tfiloh Congregation

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Bolton Street Synagogue

Chevra Ahavas Chesed, Inc.

Chevrei Tzedek Congregation

Chizuk Amuno Congregation

Congregation Beit Tikvah

Congregation Beth Shalom of

Carroll County

Congregation Tiferes Yisroel

Federation of Jewish Women's

Organizations of Maryland

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Jewish Federation of Howard County

Jewish Labor Committee

Jewish War Veterans

Jewish War Veterans, Ladies Auxiliary

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Temple Beth Shalom

Temple Isaiah

Zionist Organization of America

Baltimore District

WRITTEN TESTIMONY

Senate Bill 414 – Climate Solutions Now Act of 2021

Educations, Health, and Environmental Affairs Committee

Budget and Tax Committee

January 28, 2021

SUPPORT

Background: Senate Bill 414 (SB414) would phase in a decrease of Maryland's greenhouse gas emissions by 60% in order to achieve net-zero emissions by 2045. The bill authorizes the Commission on Environmental Justice and Sustainable Communities to seek community input and publish ways to ensure this goal is achieved in an equitable way, that accounts for historically underserved areas. The bill also introduces a number of smaller measures to help the state meet this goal. This includes planting 5 million trees, with 10% in urban areas. Requiring newly constructed state buildings to be carbon neutral, and state fleet vehicles and transit busses to be zero-emissions. Landfill emissions must also be closely monitored, and rises are to be investigated. Additionally, the bill includes a study group to develop protections for workers who may be adversely affected by these measures.

Written Comments: The urgency of the climate crisis we are facing cannot be understated. It is the single greatest existential threat we face right now, and it therefore needs to be addressed *now*. The measures outlined in this bill are ambitious and will not be easy but are necessary. For certain parts of our state, it already is too late, and if we do not act, it will be too late for the rest.

The Jewish concept of *tikkun olam* teaches us to repair the world in which we live in. Jewish law clearly states that we are not to destroy the public domain. If passed, this bill would immediately put us on the track to reverse decades of pollution that have contributed significantly to the decline of our environment and has for generations disproportionately impacted communities of color.

The Baltimore Jewish Council and the The Associated Jewish Community Federation of Baltimore are committed to repairing our world. We represent The Pearlstone Center in Reisterstown, MD, a conference center and farm that employs and teaches sustainable practices, many of which are called for in this bill. We encourage this committee to join us in our mission to create a cleaner Maryland that is healthier for everyone. With this in mind, the Baltimore Jewish Council urges a favorable report of SB 414.

The Baltimore Jewish Council, a coalition of central Maryland Jewish organizations and congregations, advocates at all levels of government, on a variety of social welfare, economic and religious concerns, to protect and promote the interests of The Associated Jewish Community Federation of Baltimore, its agencies and the Greater Baltimore Jewish community.

BALTIMORE JEWISH COUNCIL

5750 Park Heights Avenue, Suite 329 • Baltimore, Maryland 21215

410-542-4850 • fax 410-542-4834 • baltjc.org

Member of the Jewish Council for Public Affairs

Baltimore Jewish Council is an agency of The Associated

TESTIMONY FOR SB0414 Climate Solutions Now Act.pdf

Uploaded by: Plante, Cecilia

Position: FAV



TESTIMONY FOR SB0414 CLIMATE SOLUTIONS NOW ACT

Bill Sponsor: Senator Pinsky
Committee: Education, Health and Environmental Affairs
Organization Submitting: Maryland Legislative Coalition
Person Submitting: Cecilia Plante, co-chair
Position: FAVORABLE

I am submitting this testimony in favor of HB0196 on behalf of the Maryland Legislative Coalition. The Maryland Legislative Coalition is an association of activists - individuals and grassroots groups in every district in the state. We are unpaid citizen lobbyists and our Coalition supports well over 30,000 members.

This past year, the Maryland Legislative Coalition created a new subgroup specifically to support environmental legislation in the state. We started with member groups of the Coalition but through word of mouth, we connected with over 50 new groups. That is how passionate Marylanders are about the environment.

We all are enthusiastic about this bill. It is a comprehensive attack on the climate crisis and a recognition that we must have a multi-pronged approach if we are to truly get to net zero emissions. However, the aspects of the bill that most impressed us are those that deal specifically with climate justice.

This bill tasks the Maryland Commission on Environmental Justice and Sustainable Communities to identify communities disproportionately impacted by the climate crisis and set a percentage of state funds spent on climate that must be spent in those communities.

It also convenes a new Work Group that will include labor, legislators, the Secretary of Labor's office, climate groups, and renewable energy companies to make policy recommendations for how to best serve fossil fuel workers in Maryland.

It requires the planting of five million trees between 2022 and 2030. Five hundred thousand of those trees will be planted in urban areas that have been historically redlined or are economically disadvantaged. A work group will target the best locations for tree plantings to maximize environmental benefits and determine the best way to leverage private funding. Also, a grant program will be created to fund community groups planting trees in underserved urban areas through the Chesapeake Bay Trust.

Even in the area of solar, there are benefits for marginalized communities. Any community solar projects on rooftops, parking lots, or brownfields that primarily benefit low-income households are exempted from personal property tax.

Maryland needs to do this. For the environment, but also to recognize the harm that some of our communities have suffered and try to ensure that they directly benefit from the transition to a more green, healthier way of life.

We support this bill and recommend a **FAVORABLE** report in committee.

SB414 - FAV - Climate Solutions, GCAN.pdf

Uploaded by: Rosenthal, Lore

Position: FAV



Committee: Education, Health, and Environmental Affairs
Testimony on: SB414 – “Climate Solutions Now”
Organization: Greenbelt Climate Action Network
Person Submitting: Lore Rosenthal, Program Coordinator
Position: Favorable
Hearing Date: January 28, 2021

Dear Chairman Pinsky and Committee Members,

Thank you for allowing our testimony today in support of SB414.

Greenbelt Climate Action Network is a local organization, which educates residents about climate change, “systemic” solutions, how they can change their behaviors to be more sustainable, and take personal, local, systemic, and political action.

We urge you to vote favorably for SB414.

Globally, we are at a critical choice point that will determine the course of our future forever. Climate change is already here, and we are the last generation that will be able to course correct towards a livable future for all. However, we have the tools, resources and knowledge to take action right now.

This bill ensures Maryland will be part of the new green future by:

- Ensuring Maryland is in line with the current climate science by committing us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045
- Restructuring our approach to climate justice by mandating that a percentage of all future climate spending must go to “disadvantaged” communities in terms of climate change, a term to be defined by experts and stakeholders
- Ensuring that labor voices are represented in our planning process, and that jobs benefit those who need them most
- Taking several immediate steps to reduce emissions, such as planting 5 million native trees by 2030, electrifying state vehicles, requiring several net neutral buildings and mandating energy efficiency increases

Greenbelt Climate Action Network feels strongly that we need this type of bill. It gives our state overall guidance and vision on how to move forward on a whole host of climate solutions.

International experts have urged action on climate with increasing fervor in recent years for good reason: the consequences of staying the course will be highly dangerous. Here in Maryland we have a lot at stake, with nuisance flooding, high heat days and storm surges already regular occurrences. We have an opportunity to listen to scientists now while signaling to the nation that Maryland is ready to embrace the new green economy. There is no more time to delay on meaningful climate action.

For all these reasons (listening to science, climate justice, labor participation, tree planting, electrifying vehicles, energy efficiency, and net zero buildings), **we urge you to vote favorably for SB414.**

Signed,
Lore Rosenthal, Program Coordinator
Greenbelt Climate Action Network
2-R Gardenway
Greenbelt, MD 20770

Climate Solutions Now Act testimony.pdf

Uploaded by: Schablein, Jared

Position: FAV

TESTIMONY FOR SB 414

Bill Sponsor: Senator Pinsky

Committee: Education, Health, and Environmental Affairs

Organization Submitting: Lower Shore Progressive Caucus

Person Submitting: Sam Harvey

Position: FAVORABLE

I am submitting this testimony in favor of SB 414 on behalf of the Lower Shore Progressive Caucus. The Caucus is a political and activist organization on the Eastern Shore, unaffiliated with any political party, committed to empowering working people by building a Progressive Movement.

Caucus members consistently support legislation that describes the courageousness of taking critically necessary action – including action that will require common sacrifice – in defiance of inertia and paralysis. The Climate Solutions Now Act is the kind of courageous, optimistic, sweeping policy that can encircle and address the monumental issue of climate change.

We have a moral responsibility to our children, grandchildren, and future generations to address climate change. We must, at last, begin to provide responsible stewardship of the planet they will inherit. At a political impasse these past decades, evidence gathered in the scientific community has long since reached critical mass. An overwhelming majority of us can now accept that human activity is driving climate change. And while it does require courage at the beginning of a change, it has more and more become a matter of clear-eyed reason. Without question we all want to safeguard human civilization, preserve its wonders, and encourage its growth toward a more perfect and just society. There are extremely likely outcomes associated with doing nothing about climate change – that course of inaction can never lead to the realization of these objectives.

It's a matter of showing leadership when we consider a piece of legislation like the Climate Solutions Now Act here in Maryland. Every state has its splendors, but here perhaps more so than in other places our fortunes are tied to the natural world - the sea, the rivers, the Chesapeake Bay. Much of our local culture, is defined by that attachment to the tidewater, and our local economies are dependent on it. For those reasons it's appropriate that we should take a lead role here – and then there's the fact that we're more exposed than most to sea level rise.

We've left it until late in the game, and so now we must act with some real ambition. The Climate Solutions Now Act seeks to reduce our greenhouse gas emissions by 60 percent (of 2006 levels) by 2030, and achieve net zero emissions by 2045. This recommended by the community of climate scientists, as a way to limit global temperature rise to 1.5 degrees Celsius (2.7 degrees Fahrenheit). The seas will continue to rise for centuries to come, but by making a start now we can literally start to turn that tide.

This bill sets forth a broad, visionary approach to achieving this goal, through building green government buildings and public schools, supporting community solar, transitioning government fleets to alternative fuels, and planting five million trees (especially in under-served areas). And the Climate Solutions Now Act does it while considering how it will effect everyone caught up in the change. This is the hallmark of thoughtful, comprehensive, legislation.

The Lower Shore Progressive Caucus strongly supports this bill and recommends a **FAVORABLE** report in committee.

SB414_Testimony_QuakerVoice.pdf

Uploaded by: Sorce, Dona

Position: FAV



January 28, 2021

Testimony in SUPPORT of SB 414 – *Climate Solutions Now Act*

Dear Chairman Pinsky and Members of the Committee,

Quaker Voice of Maryland supports SB414, the Climate Solutions Now Act of 2021.

Globally, we are at a juncture that will determine the course of our future forever. Climate change is here, and we are the last generation that will be able to change the course of the earth towards a livable future for all. We have the tools, resources and knowledge, and leadership to take action right now.

This bill ensures Maryland will be part of and provide leadership towards the new green future by:

- Ensuring Maryland is in line with the current climate science by committing us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045
- Restructuring our approach to climate justice by mandating that a percentage of all future climate spending must go to “disadvantaged” communities in terms of climate change, a term to be defined by experts and stakeholders
- Ensuring that labor voices are represented in our planning process, and that jobs benefit those who need them most
- Taking several immediate steps to reduce emissions, such as planting 5 million native trees by 2030, electrifying state vehicles, requiring several net neutral buildings and mandating energy efficiency increases

Quaker Voice of Maryland represents Quaker Meetings throughout the State of Maryland. Our faith as Quakers is entwined with our commitment to stewardship of the Earth and care for our natural resources. We see how the destruction of these resources creates inequality, destroys community, affects health and well-being, leads to war and erodes our integrity. We are all responsible for the care of our planet Earth. We love this world as God’s gift to us all. As citizens of the United States and Maryland, we understand that we represent the wealthiest of the world’s population. As such, we understand the obligation as well as the opportunity that we have to take action towards reducing the rate of destructive climate changes and at the same time invest in clean energy production, healthier communities, green infrastructure, and transportation that is not reliant on carbon producing vehicles.

For many years scientists around the globe have been urging action on climate change with increasing alarm regarding the rate of change that is now at a crisis level. Here in Maryland we have a lot at stake, with nuisance flooding, high heat days and storm surges already regular occurrences. Maryland State agencies have begun the work of establishing foundations from which we may respond to and mitigate the impact of this change. However, we must move towards a policy of halting and preventing further harm. We have an opportunity to listen to scientists now while signaling to the nation that Maryland is ready to embrace the new green economy. There is no more time to delay on meaningful climate action.

We encourage a FAVORABLE report for this essential legislation.

Signed,

Dona Sorce

Working Group Member, Quaker Voice of Maryland
dyesorce@gmail.com // quakervoicemd@gmail.com

CSN Act Written Testimony.pdf

Uploaded by: Sundar, Saketh

Position: FAV

January 24, 2021

SUPPORT: SB0414 Climate Solutions Now Act of 2021

Dear Mr. Chairman and members of the Committee,

The Howard County Conservancy Student Climate Change Institute strongly supports SB0414 Climate Solutions Now Act of 2021.

Climate change is an issue that profoundly impacts Maryland considerably more than other states. Maryland is at risk of experiencing another one-foot rise in sea level due to climate change by 2050 and as much as a three-foot rise by 2100, contributing to higher storm wave heights, greater flooding in low-lying coastal areas, exacerbated shoreline erosion, and damage to property and infrastructure. By supporting this legislation which will put Maryland on track to achieve net-zero statewide greenhouse gas emissions by 2045 and plant 5 million trees by 2030, you will make the future brighter for millions of young Maryland residents like us. We would not have to endure a multitude of severe storms and heatwaves. We would not have to suffer from the adverse effects of climate change on our health. We would not have to experience widespread food shortages. By supporting this bill, you will not only protect future generations of Marylanders but also set a precedent for other states to follow suit.

The Climate Solutions Now act commits to investing resources into overburdened and underserved communities. It is well known that these communities are disproportionately affected by climate change, and these negative effects do not just impact one generation, they impact several generations to come. The passage of this bill will help alleviate these adverse effects on low-income and minority populations and help create a more sustainable future for all Maryland residents. A bill like the Climate Solutions Now act gives us and peers of our age immense hope for a better and brighter future. In order for us to live in a world that is not burdened by consistent extreme weather, widespread diseases, fatal heat waves, deadly flooding, lethal air quality, and constant civil unrest, immediate action is crucial. Widespread local action and legislation are key to combating the global climate change crisis, and Climate Solutions Now is a powerful step in the right direction. Climate Solutions Now demonstrates Maryland's initiative to create a safer, cleaner, and more sustainable environment for generations to come. We need to take this powerful step, and we need to take it now. Let Maryland be a leader for influential climate change legislation, and let's do our part in battling the climate change crisis.

We applaud Senator Pinsky for his commitment to battling climate change and the environment. We strongly advocate for a favorable report on this bill.

Thank you for your consideration on behalf of the Howard County Conservancy Student Climate Change Institute.

Saketh Sundar of River Hill High School, Oliver Song of Wilde Lake High School, Evan Borodin and Zainab Zarnish of Reservoir High School

SB414 - Climate Solutions Now Act - EHEA - Pinsky

Uploaded by: Tulkin, Josh

Position: FAV



7338 Baltimore Ave
Suite 102
College Park, MD 20740

Committee: Education, Health, and Environmental Matters
Testimony on: SB414 – “Climate Solutions Now Act”
Position: Favorable
Hearing Date: January 28, 2021

The Sierra Club strongly supports this legislation which would significantly amplify Maryland’s efforts to address the existential climate crisis. We urge a favorable Committee report.

In this testimony, we first highlight the importance of several bill provisions. We then discuss a funding issue raised by the bill which should be addressed by the General Assembly. Lastly, we explain our request that the bill be strengthened by embracing recommendations of the Maryland Commission on Climate Change regarding the electrification of commercial and residential buildings in Maryland.

Increasing Maryland’s GHG emissions reduction mandate to 60% by 2030 and net-zero by 2045

This legislation will put Maryland’s climate action targets in line with what leading scientists say is necessary to avoid the worst impacts of climate change. In 2018, the Intergovernmental Panel on Climate Change (IPCC) – the globe’s leading scientific authority on climate disruption – cited the devastating impacts of global warming above 1.5 degrees Celsius. The IPCC noted the emissions reduction pathway needed to limit warming to no more than 1.5 degrees Celsius, and explained that wealthy nations like the United States must reduce climate-disrupting pollution by 60% by 2030.

Requiring Maryland’s climate mitigation plans to account for the social cost of carbon

The climate changes caused by the exponential growth of greenhouse gas emissions impose economic costs that are real and substantial, but often are not embodied in economic data. These costs are what economists call “negative externalities.” It is essential that they be considered when evaluating the economic impact of state measures aimed at mitigating climate change.

Requiring MDE to use the latest science on methane pollution and leakage rates

It is of the utmost importance that the state assess the effectiveness of its climate action plans using the latest science relating to methane pollution and methane leakage rates. Methane is an extremely potent climate-warming greenhouse gas; it has a warming potential 86 times greater than carbon dioxide in the near-term. Since the IPCC has identified 2030 as a critical year for climate pollution reductions, Maryland should evaluate its climate action plans on the 20-year time horizon for the impact methane has on our climate.

Transitioning the MTA bus fleet to electric buses

These provisions also have been introduced as a stand-alone bill, SB137. Transportation is the number one source of greenhouse gas emissions in Maryland, and transitioning the MTA bus fleet to electric buses will benefit the climate, and also will benefit public health by ridding our air of toxic diesel emissions.

Founded in 1892, the Sierra Club is America’s oldest and largest grassroots environmental organization. The Maryland Chapter has over 75,000 members and supporters, and the Sierra Club nationwide has over 800,000 members and nearly four million supporters.



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Prohibiting the state from counting highway expansion programs as net climate-beneficial

Studies show that the expansion of highways induces demand of additional cars on the road, which leads to the additional consumption of fossil fuels via gasoline and diesel. Accordingly, highway expansions harm the climate, and are not climate beneficial.

Planting five million native trees by 2030, including 500,000 in underserved urban areas

Trees are an important means for capturing and reducing the amount of carbon in the atmosphere. They also have multiple other benefits, including filtering polluted runoff and serving as wildlife habitats. Planting trees in underserved urban communities will mitigate urban heat islands, support improved physical and emotional health, and increase property values.

Establishing a Commission on Environmental Justice and Sustainable Communities, and a Just Transition Employment and Retraining Work Group

The Sierra Club, nationally and in Maryland, is committed to the principles of equity, justice, and inclusion, and supports placing these principles at the center of environmental initiatives. These principles include respecting and supporting the rights of workers, regarding their ability to have good jobs, earn a decent living, and enjoy occupational health and safety protections. This bill embraces these principles, and establishes mechanisms to advance them.

SEIF funding

The Strategic Energy Investment Fund (SEIF) is a critical part of Maryland's efforts to respond to the climate crisis in the electricity sector. SEIF is sourced from a variety of programs, including auction revenues from the Regional Greenhouse Gas Initiative (RGGI), and Alternative Compliance Payments (ACPs) from the Renewable Portfolio Standard (RPS).¹ As evidenced by passage of the Clean Energy Jobs Act in 2019, the state is moving away from fossil-fuel generated electricity to clean (typically, wind and solar) energy.

An essential part of the state's transition to a clean energy economy is retiring the state's coal plants, which massively pollute our climate, air, and waters. SB148, the Maryland Coal Community Transition Act of 2021, would set a firm timetable for transitioning Maryland off of coal-powered electricity plants. It also would establish the Fossil Fuel Community Transition Fund to support impacted workers and communities, which initially would be supported with SEIF money. SB148 is a Sierra Club priority bill.

There are several bills before the General Assembly this session, including but not limited to the Coal Community Transition Act and the Climate Solutions Now Act, which would expand the permissible uses of SEIF moneys for climate-related programs. We believe the General Assembly needs to undertake a review that includes all the bills that propose to expand the permissible uses of SEIF moneys, with special consideration for SB148. The Climate Solutions Now Act, accordingly, should be considered in this context.

¹ The moneys included in SEIF have been and are growing substantially, in part due to the 2019 update to RGGI, and in part due to slower than expected growth in projects covered by the RPS solar carve-out.

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Reducing greenhouse gas emissions from commercial and residential buildings

Maryland's built environment acts as one of the state's largest contributors to climate change. The state, accordingly, must continue to amplify its efforts aimed at energy conservation and efficiency.

EmPOWER Maryland has long been one of Maryland's most important and successful climate action programs. Strengthening the program, including increasing the annual savings target to 3% as proposed in this legislation, is critical. Further still, establishing a new program to ensure energy efficiency and conservation performance standards will put Maryland in line with other leading jurisdictions (like Washington, D.C. and New York City) by achieving deeper reductions from some of our largest energy consumers.

Where this bill falls short, however, is that it does not advance the building sector decarbonization recommendations from the Maryland Commission on Climate Change's 2020 Annual Report. The Commission recommended that the General Assembly reform EmPOWER Maryland to allow gas customers to receive incentives to switch to clean, efficient heat pumps. The direct combustion of fossil fuels in buildings for heating and other appliances accounts for more climate pollution than our coal-fired power plants. The state must begin a serious effort to transition its building stock off of fossil fuel heating systems and appliances. Electrifying our homes and businesses with air- and ground-source heat pumps and induction stoves will reduce climate pollution, decrease harmful indoor air pollution, and put thousands of people to work to retrofit our buildings.

Specifically, we hope the Committee will discuss and consider strengthening the bill by aligning with the following Commission recommendations:

Maryland should enable fuel-switching to let Marylanders choose lowest cost energy systems. The General Assembly should amend section §7-211 of the Public Utilities Article to allow electrification of existing fossil fuel systems through EmPOWER, and direct the Public Service Commission to require electric utilities to proactively encourage customers with propane or oil heating systems to replace those systems with electric heat pumps, especially for homes with central air conditioning, and especially for low income households and consumers. State agencies also should modify programs they manage to facilitate fuel-switching if not already allowed.

Maryland should let EmPOWER facilitate beneficial electrification. The General Assembly should amend §7-211 of the Public Utilities Article to change the core objective of EmPOWER from electricity reduction to a portfolio of mutually reinforcing goals, including greenhouse gas emissions reduction, energy savings, net customer benefits, and reaching underserved customers. In so doing, the Utilities Article should allow for beneficial electrification. Beneficial electrification strategies are those that provide three forms of societal benefits: reduced energy consumption (total source BTUs); lower consumer costs; and reduced greenhouse gas emissions. Beneficial electrification programs should be prioritized first for low-income households and consumers, and should be aligned with other health and safety upgrades to consider a whole-home or whole-building retrofit approach to ensure cost effectiveness and a focus on benefitting underserved homes and businesses first.

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College Park, MD 20740

Conclusion

We urge a favorable report on this bill to strengthen and amplify Maryland's climate mitigation programs.

David Smedick
Senior Campaign Representative
David.Smedick@SierraClub.org

Josh Tulkin
Chapter Director
Josh.Tulkin@MDSierra.org

Founded in 1892, the Sierra Club is America's oldest and largest grassroots environmental organization. The Maryland Chapter has over 75,000 members and supporters, and the Sierra Club nationwide has over 800,000 members and nearly four million supporters.

Climate Solutions Now Act Testimony.pdf

Uploaded by: Wald, Robert

Position: FAV

Dear Chairman Pinsky and Members of the Committee,

I, Robert Wald, support SB414, the Climate Solutions Now Act of 2021.

Globally, we are at a critical choice point that will determine the course of our future forever. Climate change is already here, and we are the last generation that will be able to course correct towards a livable future for all. However, we have the tools, resources and knowledge to take action right now.

This bill ensures Maryland will be part of the new green future by:

- Ensuring Maryland is in line with the current climate science by committing us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045
- Restructuring our approach to climate justice by mandating that a percentage of all future climate spending must go to “disadvantaged” communities in terms of climate change, a term to be defined by experts and stakeholders
- Ensuring that labor voices are represented in our planning process, and that jobs benefit those who need them most
- Taking several immediate steps to reduce emissions, such as planting 5 million native trees by 2030, electrifying state vehicles, requiring several net neutral buildings and mandating energy efficiency increases

My wife and I raised our son in Montgomery County. We have witnessed dramatic climate changes in the 23 years since he was born, and we are afraid for our son’s future and for the future of his children and successive generations. It’s obvious that the federal government and all states, including Maryland, need to take significant steps right now in order to avoid the worst effects of global warming.

Although Maryland is facing economic and health challenges, we can’t afford to delay enacting robust climate legislation. This legislation will put Maryland on the right path for the climate and at the same time will help improve the health of all Marylanders and help turn around the state’s economy, creating new jobs and careers.

For the sake of all our children and grandchildren—yours and mine—I encourage a FAVORABLE report for this essential legislation.

Signed,
Robert Wald
Silver Spring, Maryland
Rwald1729@verizon.net
301-326-5181

PW Climate Solutions Now support letter 2021

Uploaded by: Walker, Paul

Position: FAV

January 26, 2021

Subject: SUPPORT for SB 0414 Climate Solutions Now Act of 2021

To: Chairman Pinsky and Honorable Members of the Senate Education, Health, and Environmental Affairs Committee

CC: Bill sponsors: Senators Pinsky, Augustine, Kelley, Hettleman, Ellis, Smith, Zucker, Kagan, Patterson, Young, Hester, Feldman, Kramer, Lee, Rosapepe, Elfreth, Guzzone, Waldstreicher, Washington, Beidle, and Lam

I'm writing to thank the sponsors for introducing this bill and encourage all members to pass the "Climate Solutions Now Act of 2021" (HB583 / SB414) so Maryland can set greenhouse gas reduction goals (GHG) aligned with IPCC Paris agreements; and, create groups to study, recommend, evaluate and administer specific GHG reduction methods to achieve those goals.

The bill makes sound recommendations and requires "specific estimates" of positive GHG and net economic/employment impacts, using a reasonable Social Cost of Carbon (SCC, @ \$50 per ton). The SCC is **the additional economic damage caused by one ton of carbon dioxide equivalents (CO2E)**, or, the benefit of avoiding a ton of CO2E. This concept was initiated by the Reagan administration, its use continuing until the most recent administration.

Since 2000 I've owned and occupied 35 acres of woodland adjacent to the Appalachian Trail on South Mountain, near Middletown in Frederick County. The property was acquired by my mother in 1953. Long time taxpayer and state citizen. In 1995 I entered into a Forest Conservation Management agreement with the state, which froze the land value at a low rate in exchange for following the plan. With the help of the DNR Forest Service, a consulting forester, loggers, trucking companies, and sawmills, a timber stand improvement harvest was done in 2016, promoting forest health and generating income for all in this local supply chain.

I'm also chair of a local environmental group and have led the Ag, Forestry, & Land Use subgroup of the Frederick County Climate Emergency Working Group since August. My focus has been researching ways to optimize CO2E removed by forests and measuring benefits forests provide.

It's the economic benefits of the planting of 5M trees I'll try to help quantify. Sources are below my signature.

Quantifying SCC of CO2E avoided by planting 4.5M trees in "rural" NE US + 500k trees in urban settings, @ \$50 per ton, using 1.1 to adjust MT to Tons.

The Carbon estimator from the World Economic Forum, found at us.1t.org gives a more conservative "Carbon benefit" from planting than Conserving the same amount of acreage, and uses higher values for urban plantings, all stated in Metric Tons (MT CO2E) annually. For simplicity, plantings are combined, no discounting is attempted.

After 30 years = 983,301 MT CO2E + 243,629 MT CO2E = 1.2 M MT X 50 = \$61.3M

After 50 years = 1,638,384 MT CO2E + 406,047 MT CO2E = 2.04 M MT X \$50 = \$102.2 M x 1.1 = \$112.42M

After 100 years = 3,276,767 MT CO2E + 812,094 MT CO2E = 4.09 M MT x \$50 = \$204.4M x 1.1 = \$224.84M

If the above is the only payback, does it justify a \$16.25M annual investment for 9 years (\$146.25M)? I think, yes! Monies will be spent (and re-spent) in Maryland. Employing Marylanders in urban and rural locations where green jobs - any jobs - will have large impact, helping fuel the state forestry industry, and providing incentive payments to farmers for riparian plantings. After 50 years, planting cost plus SCC is \$258M for Maryland.

“A study referenced below found each \$1 million invested in forest restoration can support as many as 40 direct, indirect and induced jobs. Far and away the most jobs per million spent, second being rail/transit at 22 jobs, road/bridge repair and conservation/parks employing 20 per million. Many of the new employment opportunities generated will benefit urban and rural communities hardest hit by COVID-related job losses.”(4).

Maryland forest industry economic contribution to state economy

“The fifth largest industry in the State, the forest industry had a value of about \$4 billion in 2019. In western Maryland, the industry is the largest employer in Allegany and Garrett counties and on the Eastern Shore, it is the second largest. In 2019, the industry generated 5,150 forestry-related jobs, with a payroll of \$292 million. Production of lumber and building materials in Fiscal Year 2019 generated \$418 million, and supplied 8.52% of Maryland's overall tax receipts.” (2) Further, “It is estimated that more than 18,000 people depend on the forest products industry for their livelihood.”(3)

Natural climate solutions (forestry, healthy soils, composting, lawns to forests or natives) can absorb up to 30% of fossil fuel emissions. Forests are the best natural climate solution, removing 15% of CO₂E from the atmosphere. These activities deserve more consideration for investment and implementation as they're comparatively inexpensive, and dollars spent stay home.

This is a fantastic start, but there's more to be done. USDA's 2019 survey of Maryland forests (5) reports an annual net loss of 8789 acres of forest. 8789 acres lost requires the planting of 2.6m trees, or 300 per acre, annually, to break even. And carbon benefits from new plantings, we've seen, don't really start to payback for 30 years. Further action should be considered to reduce the rate of loss to zero, given the value of the climate service forests provide.

Thank you for considering these facts in making your decision. I hope it helps you decide to make an affirmative vote on the “Climate Solutions Now Act of 2021”.

Sincerely,

R. Paul Walker

9478 Frostown Road,

Middletown, MD 21769

301-318-7995

Sources:

(1.0). "Forest carbon. An essential natural solution for climate change" Authors Paul Catanzaro, University of Massachusetts Amherst; Anthony D'Amato, University of Vermont. © 2019 University of Massachusetts Amherst

(1). Carbon estimator: [us.1t.org](https://us1t.org) Copyright to World Economic Forum, 2021. Terms of Service. Privacy Policy.

(2). Maryland State Archives. Maryland Manual On-Line, "Maryland at a Glance, Forests", © Copyright November 20, 2020 Maryland State Archives
<https://msa.maryland.gov/msa/mdmanual/01glance/html/forests.html>

(3) The Maryland Department of Natural Resources Forest Service, Forests of Maryland, 2016, Forestry Facts <https://dnr.maryland.gov/forests/Pages/mdfacts.aspx>

(4). Heidi Garrett-Peltier, The Political Economy Research Institute, University of Massachusetts, Amherst, 2009

(5). USDA Forest Service. 2020. Forests of Maryland, 2019. Resource Update FS-246. Madison, WI: U.S. Department of Agriculture, Forest Service. 2p. <https://doi.org/10.2737/FS-RU-246>

Climate Reality Baltimore Testimony in Favor of th

Uploaded by: Weber, Ted

Position: FAV



January 28, 2021

Testimony in SUPPORT of SB 414 – *Climate Solutions Now Act*

Dear Chairman Pinsky and Members of the Committee,

The Climate Reality Baltimore Area Chapter supports SB414, the Climate Solutions Now Act of 2021.

The Climate Reality Project was founded by former US Vice President Al Gore with a mission to confront the climate crisis and point out the need for urgent action to cut greenhouse gas emissions and speed a just transition to clean energy worldwide.

Globally, we are at a critical choice point that will determine the course of our future forever. Climate change is already here, and we are the last generation that will be able to course correct towards a livable future for all. However, we have the tools, resources and knowledge to take action right now.

This bill ensures Maryland will be part of the new green future by:

- Ensuring Maryland is in line with the current climate science by committing us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045;
- Restructuring our approach to climate justice by mandating that a percentage of all future climate spending must go to disadvantaged communities in terms of climate change, a term to be defined by experts and stakeholders;
- Ensuring that labor voices are represented in our planning process, and that jobs benefit those who need them most; and,
- Taking several immediate steps to reduce emissions, such as planting 5 million native trees by 2030, electrifying state vehicles, and mandating energy efficiency increases.

International experts have urged action on climate with increasing fervor in recent years for good reason: the consequences of staying the course will be highly dangerous. In Maryland, we have a lot at stake, with nuisance flooding, high heat days and storm surges already regular occurrences. We have an opportunity to listen to scientists now while signaling to the nation that Maryland is ready to embrace the new green economy. There is no more time to delay on meaningful climate action.

We encourage a FAVORABLE report for this essential legislation.

Sincerely,

Ted Weber

Chair, Climate Reality Baltimore Area Chapter

climaterealitybaltimore@gmail.com

<https://www.climaterealityproject.org/>

MDPHA-testimony_SB0414 Climate Solutions Now 2021.

Uploaded by: Weiss, Erica

Position: FAV



**Maryland
Public Health
Association**

Mission: To improve public health in Maryland through education and advocacy

Vision: Healthy Marylanders living in Healthy Communities

SB0414 Climate Solutions Now Act of 2021

Hearing Date: 1/28/21

Committee: Education, Health, and Environmental Affairs

Position: SUPPORT

Thank you, Chair Senator Pinsky, Vice-Chair Senator Kagan, fellow bill sponsors, Senators Augustine, Kelley, Hettleman, Ellis, Smith, Zucker, Patterson, Young, Hester, Feldman, Kramer, Lee, Rosapepe, Elfreth, Guzzone, Waldstreicher, Washington, Beidle, and Lam, and committee members. We submit this testimony on behalf of the Maryland Public Health Association (MdPHA) to express our SUPPORT for SB0414 – Climate Solutions Now Act of 2021. We appreciate this bill’s purpose to save lives with smart strategies to reduce greenhouse gas emissions, reduce environmental injustice, and protect workers. We view this bill as an important tool for all Marylanders.

As you know, climate change is an urgent public health threat. From extreme heat, flooding, air pollution, and more, climate change is impacting health across the state. Exposure to extreme heat contributes to heat-related illnesses and significantly increases the risk of hospitalization for asthma and heart attacks.¹ Exposure to elevated levels of air pollution, such as ozone and particulate pollution contributes to asthma attacks, cardiovascular disease and premature death.

Over the past year we have seen how interconnected the COVID-19 pandemic, climate change, air pollution, and inequity are. A robust study by Harvard recently found that even a small increase in long-term particulate (PM2.5) exposure led to an 11% increase in the COVID-19 death rate.² The burning of fossil fuels is one of the biggest contributors to deadly air pollution, such as particle pollution.

Communities of color and low-income communities bear a disproportionate burden from fossil fuel pollution. The environmental justice and health equity components of this bill are critical to ensuring that everyone benefits from a transition to a clean energy future, especially those overburdened by fossil fuel pollution.

What the pandemic has shown us is that we must treat COVID-19, climate change, and health inequities in tandem. The Climate Solutions Now Act is a step in the right direction. It will save lives and improve health by reducing air pollution from fossil fuels and by reducing greenhouse gas emissions that worsen climate change. Please support this bill.

The Maryland Public Health Association (MdPHA) is a nonprofit, statewide organization of public health professionals dedicated to improving the lives of all Marylanders through education and advocacy in support of healthy Marylanders living in healthy communities. MdPHA is the state affiliate of the American Public Health Association, a nearly 145-year-old professional organization dedicated to improving population health and reducing the health disparities that plague our state and our nation.

¹<https://mde.maryland.gov/programs/Marylander/Documents/MCCC/Publications/Reports/MarylandClimateandHealthProfileReport.pdf>

²Wu X, Nethery RC, Sabath MB, Braun D, Dominici F. Air pollution and COVID-19 mortality in the United States: Strengths and limitations of an ecological regression analysis. *Science Advances*. 2020;6(45).

Maryland Public Health Association (MdPHA)

PO Box 7045 • 6801 Oak Hall Ln • Columbia, MD 21045-9998

GetInfo@MdPHA.org www.mdpha.org 443.475.0242

Testimony in SUPPORT of SB 414 – Climate Solutions

Uploaded by: White, Ruth

Position: FAV



HoCoClimateAction.org
Howard County, Maryland

Testimony in SUPPORT of SB 414 – *Climate Solutions Now Act*

Hearing Date: January 28, 2021

Bill Sponsor: Sen. Paul Pinsky

Committee: Education, Health, and Environmental Affairs

Submitting: Howard County Climate Action

Position: Favorable

[HoCo Climate Action](#) -- a [350.org](#) local chapter and a grassroots organization representing more than 1,450 subscribers, and a member of the Howard County Climate Collaboration -- supports SB414, the Climate Solutions Now Act of 2021.

We have been educating ourselves and others in Howard County about the climate crisis for over 13 years. We have supported climate change legislation at the county, state and federal level with varying degrees of success during this time, often in collaboration with larger coalitions of county and statewide partners. We are excited about the bold commitments in this bill to reduce climate emissions.

Recent state administrations have passed legislation to bring Maryland forward as a climate leader. We saw the disaster fracking has been in Pennsylvania and other states and we banned it here. But cannot stop making dramatic improvements. We see our shorelines on the eastern shore disappearing and our major cities increasingly unable to handle flooding (Baltimore, Ellicott City, Annapolis and more). Maryland has much at stake, with nuisance flooding, heatwaves and storm surges already regular occurrences. The stronger unprecedented storms and weather challenges our farmers, our city dwellers, our transportations systems and all our citizens.

Every citizen is concerned about their health in the era of covid. We know that those who live in the many areas of high air pollution are more at risk in normal times to asthma, heart disease and other disorders which affect their well-being and lifespan. But in the era of covid, toxins in the air make people more susceptible to disease and possible death from this modern plague.

We have the responsibility to use the available tools, resources and knowledge to take action right now.

This bill would make a Maryland a leader in climate action by:

- **Ensuring Maryland is in line with the current climate science.** The bill commits us to a 60% reduction in carbon emissions below 2006 levels by 2030 and to reaching net zero emissions by 2045
- **Embracing climate justice.** The bill mandates that a percentage of climate spending must go to communities hit hardest by climate change.
- **Ensuring that labor voices are represented in our planning process** and that jobs benefit those who need them most
- **Taking several immediate steps to reduce emissions**, such as planting 5 million native trees by 2030, and electrifying state vehicles. In addition, buildings that receive at least 25% of their funding

from the state must be net zero, with some exceptions for schools, and mandating energy efficiency increases.

The funding provisions of this bill make sense to us. The Strategic Energy Investment Fund will be used, but the bill does not take away from any of the existing SEIF funding percentages, it only uses funds that are above and beyond the usual annual budget for SEIF. And the Bay Restoration Fund will be used to enhance existing Department of Natural Resources and Department of Agriculture programs and create a new Urban Tree Planting program

International experts have urged action on climate with increasing fervor in recent years for good reason: The consequences of staying the course are dangerous. We have an opportunity to heed the warnings of scientists now while signaling to the nation that Maryland is ready to embrace a climate-friendly economy. We can no longer delay meaningful climate action.

We encourage a FAVORABLE report for this essential legislation.

HoCo Climate Action

HoCoClimateAction@gmail.com -

Submitted by Ruth White, Steering and Advocacy Committee, Columbia MD

www.HoCoClimateAction.org

SB414_StrongFutreMD_PublicComment_FAV.pdf

Uploaded by: Wilkerson, Alice

Position: FAV



**Testimony in Support of SB 414 – Climate Solutions Now Act of 2021
(Chairman Pinsky)
FAVORABLE**

January 28, 2021

Dear Chairman Pinsky and Members of the Education, Health, and Environmental Affairs Committee:

In addition to our organizational testimony in support of SB 414, Strong Future Maryland is proud to present the public comments of more than 50 Maryland residents who strongly support this legislation. The people of Maryland want our state to be a climate leader, and take decisive steps to protect our environment and our future. Many of them write about wanting their children and grandchildren to inherit a livable planet; others highlight the importance of addressing environmental justice through public policy. The message is clear: Marylanders support SB 414, and are calling on the General Assembly to take climate action this session.

Public Comment:

James Bell
Montgomery County

I believe clean and sustainable energy policies are effective in fighting negative climate change affecting all persons and the U.S. economy.

Dominique Edmondson
Prince George's County
Build a green economy that works for everyone.

Linda Murphy
Prince George's County

The climate crisis is jeopardizing life on Earth as we know it. Every aspect of life is already being affected by an increasing number and intensity of fires, by stronger and more frequent hurricanes, by freak weather systems that bring 100 year rains to areas, including Maryland's Hyattsville community where my neighbors have had their basements flood twice in the last few years due to overwhelmed sewer systems, etc. If we do not do everything in our power to address climate change, life on Earth as we know it will cease to exist.

Dr. Craig Ilgenfritz
Baltimore County
Our existence is at stake if we do not effectively act now!

G. Countryman-Mills
Montgomery County
We do not have time to dither and postpone any longer. Please act now!

Sister Patricia Kirk
Baltimore County
Climate change and our attention to it is LONG overdue!

Taina Litwak
Montgomery County
Our air and water quality MATTER.

Tracey Katsouros
Charles County
We need to build a green economy that works for everyone, and give crucial support to underserved communities impacted by climate change. We must do everything we can as soon as possible.

Peggy Meyer
Baltimore City
We are destroying our planet and the poor are suffering disproportionately. We need to care!

David Band
Montgomery County
We need to pass the Climate Solutions Now Act so the future will be safe for the next generations.

Anne Matey
Wicomico County
We are in danger of losing many plants that can not adapt quickly enough to climate change. This will directly affect our entire ecosystem and disruption of the environment with detrimental effects!

Wally Minnick
Washington County
I support climate solutions for future generations' health and well-being.

John Hamilton
Howard County
Our children deserve a CLEAN environment.

Marijane Monck
Howard County
We can't waste any more time and must act now.

Aaeron Robb
Baltimore City
We will have no future without true change.

Amy Mason
Baltimore County
Climate change affects all living things - humans, plants and animals. More severe storms that result from climate change are devastating communities by damaging homes and businesses. Those with lower incomes are most severely affected by climate change because their options are limited. This in turn hurts everyone. We need to act now to help limit the damage.

Lisa Finstrom
Montgomery County
We face catastrophic climate consequences if we don't act.

Gail Fisher
Montgomery County
We are losing our canopy, our insects, our birds, and all else that sustains life.

Molly Hauk
Montgomery County
Climate change is extremely important. We have to put it first.

Anna Weitzman
Montgomery County
We are all dependent on healthy ecosystems for our survival. These ecosystems are facing destabilization and extinctions from climate change that will endanger humans as well as all other organisms. We must do all we can to protect our planet.

Paula Willey
Frederick County
We need to protect and clean our environment for ourselves, our children and our future Marylanders.

Andrew Bare
Frederick County
We need to treat the climate crisis seriously. Even as a small state, we are a wealthy state and need to do our part. If we can't figure it out, how can we expect others to.

David Seldin
Howard County
Increased warming and more extreme weather events will be catastrophic and costly.

Beverly Antonio

Queen Anne's County

It's crucial that we address climate change immediately. We already have frequent extreme weather, hotter temperatures and, here on the Eastern Shore, too much rain. It's wreaking havoc with my well and septic system. Our farmers are worried too.

Meagen Williams

Montgomery County

Climate change is the most urgent issue facing our state and our world. Government, business, non-profit, community and religious leaders must act. The Climate Solutions Now Act is the first step for Maryland and I strongly support it.

Sharon Nakhimovsky

Montgomery County

There will be no better time to act. The urgency is real, the danger is towards livability on earth. Please take this step towards science, towards life for our children and children's children. Please be brave and put long term interests for humanity and our ecosystem ahead of the short term needs of climate endangering industries.

Fred Morse

Montgomery County

It is needed, realistic, and will help every citizen in the state.

Joan Slettvet

Anne Arundel County

We owe it to our children and grandchildren to finally take action!

Rush Kester

Prince George's County

Maryland can do its part in limiting carbon emissions, such as promoting green energy, more bike lanes & hybrid public transportation.

Barbara Cavanagh

Baltimore County

MD must do all that it can to address climate change and set this as the highest priority in this legislative session.

Sherri Fisher

Baltimore City

The time is now to act swiftly. As a parent the work on climate change is a critical issue for my family to ensure my and every child a bright future. In a state on the front lines of climate change we risk not only the critical devastation of our lands but jobs and livelihoods. We live in Baltimore and the health inequities as a result of poverty are in many ways a result of and made worse through the climate crisis. It is important to support our communities through these changes and this bill does that. Protect our children's future in support of this bill.

Ron Witko
Queen Anne's County

We need to protect our environment and at the same time this will help spur new jobs.

Jacqueline Hillian
Prince George's County

The Climate Solutions Now Act will make a major difference in our environment now and the environment that will be left for generations to come. We see now how our environmental world is changing; forest fires are burning and the Amazon is being bulldozed for commerce. These issues will not allow us to pass down a healthy environment to generations to come.

Faith Kirk
Montgomery County

We are running out of time to successfully take the necessary action to save our community and state from the devastating results of climate change.

Nick Kyriacou
Anne Arundel County

Climate change is real. Maryland must take the next step to build a green economy starting in 2021 with SB 414 and HB 583. Requiring the State to reduce statewide greenhouse gas emissions by 60% from 2006 levels by 2030; requiring the State to achieve net-zero statewide greenhouse gas emissions by 2045.

Christine Pannell
Baltimore County

For the past 100 years we've been living on this planet with the attitude that our actions do not have consequences -- that plastics, fossil fuels, emissions, etc. do not impact us and thus don't warrant our time and attention. It is critical, and past due, that we take a hard look at the consequences of our actions and support legislation and policies that begin to end (and ultimately reverse) the immense harm we've done to this planet before it's too late for future generations. I support climate action because I want my nieces and nephews to inherit a planet that isn't on the brink of extinction, past the point of no return.

Mary Finelli
Montgomery County

The climate crisis is the gravest problem for life on Earth. It warrants paramount attention with swift and highly effective action.

Christine Latham
Prince George's County

We have a responsibility to provide a safe living environment for our children. What we do or don't do now, determines their right to a clean air future. Please do the right thing.

Eugenie Jenkins and Brian Holmes
Baltimore City

Climate change and environmental protection are the single most important issues that the world has ever faced. We either do something immediate and drastic or we let our future generations perish. Build the green economy ASAP.

Maj-Britt Dohile
Montgomery County

The climate crisis is the most important problem we face today. It's an existential threat for our children and grandchildren. We need to act!

Elaine Schwartzbach
Montgomery County

I support the Climate Solutions Now Act so my grandchildren can have a long, healthy life.

Krista Adams
Montgomery County

I think Maryland has a ways to go to protect not only our state resources but also in adding our voices loud and clear to the global conversation. We are guardians of the Chesapeake, a true natural wonder! Let's hold oil companies accountable and use their planet polluting profits to change our legacy and give the next generation the education they need to meet this global challenge.

Arlene Waldo
Baltimore County

We don't have much time to correct this man made problem. I would like to see my great nieces and nephews have a chance at life.

Patrick Corvington
Montgomery County

We need bold solutions and MD should be a national leader.

Ann Andrex
Frederick County

I want my granddaughters, and their grandchildren, to have a future with livable air, water, and soil.

Edward Larkey
Baltimore City

Much of the Eastern Shore and other coastal areas of the state are affected by rising sea levels caused by global warming, endangering people and wildlife, cities and rural areas. It is also greatly affected by air pollution and environmental degradation through the environmental damage caused by pollution of rivers and other waterways, especially the fishing and poultry industries.

Michael Italiano
Montgomery County

There is no greater issue facing mankind. If we do not act on climate and the planet becomes inhabitable, all other issues of the day are moot.

Liliane Floge
Montgomery County

Everyone and every locality must take whatever actions they can starting now to slow global warming. In my private life my family and I do all we can and encourage others to do so, but those individual actions are not enough. Actions must quickly and strongly be taken now.

Deborah Euzebio
Prince George's County

As a former educator...I support the Climate Solutions Now Act because environmental racism is real, and my students as well as so many families in Maryland are impacted by the emissions of greenhouse gases and how it affects our air quality. The future of our state, our nation, and our country depends on critical legislation like this to ensure the health of the next generation. I am urging the Maryland General Assembly to support and pass this bill as soon as possible.

Deanna Okrent
Montgomery County

Clean air is critical to raising healthy children, and preserving the future of our state and our country.

Eileen Nadolski
Howard County

For my entire adult life, I have been an Audubon bird watcher, member of Appalachian Mt. Club, and loved walking in the woods. I have watched abominable leveling of trees just in my Bonnie Branch neighborhood since I moved to Ellicott City, MD in 2002. This has created a huge imbalance in the environment for people and animals, for the educational resources of our community...Maryland's environment has deteriorated tremendously in the last 20 years due to corporate greed. Please support the Climate Solutions Now Act.

Richenda Van Leeuwen
Montgomery County

We need an 'all of the above' approach to climate action. We need to retire our remaining coal-fired generation and continue investing in developing lower carbon alternatives - including accelerating the potential development of Maryland's excellent offshore wind resources - while pursuing much more energy efficient policies for our commercial and residential buildings. We also need to plant more native trees - not only because they have some impact in terms of carbon capture and sequestration, but also because they help filter out particulates and are the lungs of a community. More urban tree canopy, more green space is psychologically good and lower pollution levels equate to fewer children suffering health effects from high pollution such as reduced lung capacity. This is an investment not only for the climate but also for our children and grandchildren in Maryland.

SB414_StrongFutureMaryland_FAV.pdf

Uploaded by: Wilkerson, Alice

Position: FAV



**Testimony in Support of SB 414 – Climate Solutions Now Act of 2021
(Chairman Pinsky)**

January 28, 2021

Dear Chairman Pinsky and Members of the Education, Health, and Environmental Affairs Committee:

On behalf of Strong Future Maryland, we write in strong support of SB 414. Strong Future Maryland works to advance bold, progressive policy changes to address systemic inequality and promote a sustainable, just and prosperous economic future for all Marylanders. We urge you to support this legislation as part of the forward-thinking mandate for climate action favored by the people of Maryland, and for its focus on environmental justice.

Just last week, an international group of scientists released a paper stating the planet is facing a “ghastly future of mass extinction, declining health and climate-disruption upheavals” that threaten human survival because of ignorance and inaction. The 17 experts say the planet is in a much worse state than most people – even scientists – understood.

“The scale of the threats to the biosphere and all its lifeforms – including humanity – is in fact so great that it is difficult to grasp for even well-informed experts,” they write in a report in [Frontiers in Conservation Science](#) which references more than 150 studies detailing the world’s major environmental challenges.

Notably, the impacts of our slowly warming planet are inextricably intertwined with all our other challenges. Climate change impacts the likelihood of future pandemics, climate-induced mass migrations, and battles over resources. It affects Maryland’s agricultural economy, the ability of our biodiversity to thrive, and the health of the Chesapeake and Coastal Bays. As Maryland already faces severe air quality issues, climate change further compromises the health of our residents.

This bill takes critical climate action measures that meet the urgency of this moment in time.

As a country, we are in the midst of a new racial reckoning, and **we must not ignore the disproportionate environmental burdens faced by communities of color and low-income communities.** According to the Environmental Protection Agency, communities of color and low-income communities in the United States are often disproportionately burdened by environmental and public health hazards, and enjoy fewer benefits from environmental programs and natural resources.

According to a [2015 report](#) from the Environmental Law Clinic of the University of Maryland Francis King Carey School of Law, socioeconomically disadvantaged and African American communities in Maryland bear a disproportionate burden of cancer risk from air toxics exposure and are also more likely to live in close proximity to toxic releasing facilities like incinerators. The American Lung Association 2020 [“Road to Clean Air” report](#) gives Maryland abysmal grades for smog or ozone pollution, including F's for both Baltimore and Prince George's County. Across Baltimore, the hottest areas tend to be the poorest and that pattern is not unusual. In dozens of major U.S. cities, low-income neighborhoods are more likely to be hotter than their wealthier counterparts.

At the same time, by all accounts, Maryland is severely lacking when it comes to having policies on the books that advocate for Environmental Justice. The most important note from the aforementioned 2015 report: is that most of the formal recommendations made to the General Assembly languished over the period of 1999-2015. The Law Clinic states:

“Maryland should adopt a more systematic and transparent approach to addressing environmental justice issues, including requiring each state agency to develop an environmental justice strategy and regularly report on its progress. The state should also create an Office of Environmental Justice to coordinate and support environmental justice efforts, expand community representation on the Commission on Environmental Justice, and develop new policies to address and prevent environmental injustice.”

While this legislation does not exactly mirror the recommendations in the report, it places the state on a strategic path towards addressing environmental justice. Specifically, it charges the Commission on Environmental Justice and Sustainable Communities with determining what percent of Maryland’s climate funding must be spent in overburdened, underserved communities that are disproportionately impacted by climate change emissions.

In addition, this bill establishes targets that are in line with recommendations from the Intergovernmental Panel on Climate Change (IPCC), made up of the leading climate scientists in the world.

Maryland must do more for climate action — in the name of environmental justice, for the health of our communities, and for the future of our families. This committee can make a commitment to that work by issuing a favorable report on SB 414.

John B. King Jr.
Founder and Board Chair

Alice Wilkerson
Executive Director

2021Audubon testimony FOR SB0414 Climate Jan 16.pd

Uploaded by: Wilson, David

Position: FAV



State Office
Patterson Park Audubon Center
Important Bird Area Program
2901 East Baltimore Street
Baltimore, MD 21224
Tel: 410-558-2473
md.audubon.org

January 28, 2021

The Maryland Senate Education, Health & Environmental Affairs Committee

SB0414 Climate Solutions Now

Position: Support

Climate change is taking its toll on birds in Maryland due to rising temperatures, changing rainfall patterns and climate-driven sea level rise. Audubon's latest climate report, [*Survival by Degrees: 389 Bird Species on the Brink*](#), released in 2019 finds that two-thirds of America's birds are threatened with extinction from climate change, but it also offers reason for hope for 76% of these birds if we can limit global temperature increases.

For this reason, Audubon Maryland-DC asks you to vote SB414 out of committee and onto the floor. We are one of 22 state programs of the National Audubon Society with approximately 19,000 members in Maryland.

The world's top scientists are warning that if we don't act immediately to reduce greenhouse gas emissions, it's about to get much worse. Currently, our state's draft climate plan to reduce emissions falls well short of climate scientists' recommendations and actions taken by other states.

In order to slow and reverse the loss of so many bird species in Maryland, we have to drastically improve our climate action plan and put in place policies that will begin reducing emissions immediately. It starts by passing this commonsense bill to achieve net-zero statewide greenhouse gas emissions by 2045 and adopting a plan that reduces statewide greenhouse gas emissions by 60% by 2030. These targets are in line with recommendations from the Intergovernmental Panel on Climate Change (IPCC), made up of the leading climate scientists in the world.

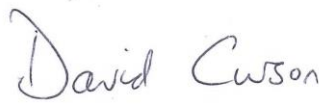
The habitat improvements, including the call for the planting of 5 million native trees and CREP streamside buffer incentives, render this bill even more palatable for birdlife.

The bill is funded by fossil fuel fees expanded under the Hogan Administration. Maryland is one of 11 states in the Regional Greenhouse Gas Initiative (RGGI), an interstate cooperative that caps carbon emissions on fossil fuel polluters and charges a fee for the allowance of exceeding the limit. Under regulations implemented by the Hogan Administration, Maryland is estimated to receive \$400 million in additional revenue by 2030.

This is the measured, bipartisan way for Maryland to save its iconic birdlife. Please vote SB414 out of committee and vote FOR it when it hits the floor.

Sincerely,

David Curson, PhD

A handwritten signature in cursive script that reads "David Curson". The ink is dark and the handwriting is fluid and legible.

Director of Bird Conservation
Audubon Maryland-DC

Copy of SB414-FAV-TPMEC-ClimateSolutionsNow (1).pd

Uploaded by: Younts, Diana

Position: FAV



Environment Committee

Committee: Education, Health & Environmental Affairs
Testimony on: SB414 - “Climate Solutions Now”
Organization: Takoma Park Mobilization Environment Committee
Person
Submitting: Diana Younts, co-chair
Position: Favorable
Hearing Date: January 28, 2021

Dear Mr. Chairman and Committee Members,

We are testifying today to urge you to vote favorably for SB414. Takoma Park Mobilization Environment Committee is a grassroots organization focused on state and county level climate action. We support SB414 because it would bring Maryland into alignment with the most recent scientific recommendations for addressing climate change, fixes Maryland’s flawed draft greenhouse gas (GHG) reduction plan, ensures that communities disproportionately burdened by environmental pollutants and other hazards are an integral part of the solution to climate change, and provides a just transition for workers. In our testimony, however, we would like to focus on how the bill also supports Montgomery County’s ambitious Climate Action Plan.

SB 414 Supports Montgomery County’s Climate Action Plan (CAP): Montgomery County has committed to reducing its greenhouse gas emissions by 80 percent by 2027 and 100% by 2035 and has issued its draft Climate Action Plan outlining the steps to achieve that goal. Here are some of the ways SB414 complements Montgomery County’s Climate Action Plan and helps significantly in achieving Montgomery County’s goal:

Climate Solutions Now Provisions:	Montgomery County Draft CAP Supported by SB414:
Increase greenhouse gas reduction goals from 40% to 60% by 2030 and net zero by 2045	Increased state GHG reduction goals help CAP by narrowing the gap between state & county GHG goals & by promoting GHG reduction in surrounding jurisdictions
Increase energy efficiency requirement from 2 % to 3%	SB414 provides state level legislation and funding for building energy efficiency goals specified by CAP
Funding for zero emission public transit buses (funds from Transportation Trust Fund)	SB414 provides legislation and funding for CAP Transportation Action to electrify Public and School Buses

\$5 M over 10 years with \$500K reserved for urban areas for tree planting (funds from Chesapeake Bay Restoration Fund)	SB414 provides legislation and support for CAP Sequestration Actions to increase tree canopy and to restore forests, meadows, and wetlands
Net-Zero School Loan Fund (Loans from Strategic Energy Investment Funds – carbon fee from RGGI)	SB414 provides loan funding & legislation for CAP Buildings Action & Electrification Code Requirements for Existing Commercial and Public Buildings & Net Zero Energy Building Code for New Construction
Requirement for Solar Ready Roofs	SB414 provides legislation for CAP Energy Action for Solar Voltaic Systems and Code Requirements

Key Points:

The Climate Solutions Now bill will help Montgomery County implement its draft Climate Action Plan by:

- Increasing the state greenhouse gas reduction goals and narrowing the gap between the County and State goals.
- Increasing State energy efficiency requirements from 2 % to 3 % which will provide more funding for county building energy efficiency improvements.
- Providing funding from the State Transportation Trust Fund for zero emission public transit buses.
- Providing funding from the Chesapeake Bay Restoration Fund for ambitious tree planting with a carve-out for urban areas.
- Providing loans for net zero school buildings from the State Strategic Energy Investment Fund.
- Providing building standards to require new construction to have solar ready roofs.

For these reasons we urge you to vote favorably for SB414.

SB414-FAV-TPMEC-ClimateSolutionsNow_1.26.21.docx.p

Uploaded by: Younts, Diana

Position: FAV

TAKOMA PARK MOBILIZATION

Environment Committee

Committee: Education, Health & Environmental Affairs
Testimony on: SB414 - “Climate Solutions Now”
Organization: Takoma Park Mobilization Environment Committee
Person
Submitting: Diana Younts, co-chair
Position: Favorable
Hearing Date: January 28, 2021

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SB 414 Supports Montgomery County’s Climate Action Plan (CAP): Montgomery County has committed to reducing its greenhouse gas emissions by 80% by 2027 and 100% by 2035 and has issued its draft Climate Action Plan outlining the steps to achieve that goal. Here are some of the ways SB414 complements Montgomery County’s Climate Action Plan and helps significantly in achieving Montgomery County’s greenhouse gas reduction goals.

- Increasing the State greenhouse gas reduction goals and thus narrowing the gap between the County and State goals.
- Increasing State energy efficiency requirements from 2 % to 3 % which will provide more funding for County building energy efficiency improvements.
- Providing funding from the State Transportation Trust Fund for zero emission public transit buses.
- Providing funding from the Chesapeake Bay Restoration Fund for ambitious tree planting with a carve-out for urban areas that can help with County carbon sequestration goals.
- Providing loans for net zero school buildings from the State Strategic Energy Investment Fund which can help electrify County schools.

- Providing building measures to dramatically increase efficiency of new construction and adding a requirement for solar ready roofs.

For these reasons we urge you to vote favorably for SB414.

USGBC Support Letter for MD SB0414 1-26-21.pdf

Uploaded by: Blackwelder, Alysson

Position: FWA



PRESIDENT & CEO

Mahesh Ramanujam

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usgbc.org

January 26, 2021

The Honorable Paul Pinsky
Chair, Committee on Education, Health, and Environmental Affairs
(EHEA)
2 West
Miller Senate Office Building
Annapolis, Maryland 21401

RE: SB0414, Climate Solutions Now Act of 2021

Dear Chairman Pinsky and Members of the EHEA Committee,

On behalf of the U.S. Green Building Council (USGBC), a non-profit organization with nearly 9,000 member companies nationwide, and our strong community in Maryland, I respectfully offer our comments in strong support of SB0414, the Climate Solutions Now Act of 2021. As a Montgomery County, Maryland resident and a proud public school parent, I appreciate your consideration of the following remarks.

USGBC is a non-profit organization that is dedicated to transforming the way buildings and communities are designed, built, and operated in order to enable a more environmentally and socially responsible, healthy, and prosperous world. USGBC is perhaps best known for our LEED green building certification system, though we also actively advocate for the advancement of high-performing, cost-effective, and resilient buildings – including schools – that save resources and money. A core area of our work is green schools, particularly public schools that are well-designed, constructed, maintained, and operated to facilitate learning, health and wellness, and decrease operating budgets through reduced utility costs.

LEED certified buildings can support climate mitigation through reduced reliance on resources, a smaller carbon footprint, and a consideration of lifecycle impacts of building materials. In fact, more than a third of the total points available in LEED v4 [address](#) climate change – more than any other outcome. For more on how LEED works to mitigate climate change, see our LEED and Climate Mitigation [brief](#).

USGBC supports Senate Bill 414 (SB0414) that will put Maryland on track to cut state greenhouse gas emissions by 60 percent by 2030 and to achieve net zero emissions by 2045. In order to reach these ambitious targets, the bill would mandate state-funded buildings – except for schools, buildings that receive at least 25 percent of their funding from the state -- to be net zero energy. SB0414 would also require at least one school built in each district between now and 2030 to be net zero energy and for all other schools to be solar-ready. Critically, the bill provides for supplemental funding to enable net zero energy schools.

We applaud the sponsors for recognizing and reaffirming the importance of state buildings to be high-performing green buildings, and for layering the net zero energy performance as a required outcome of such buildings, in order to make progress on Maryland's climate goals. USGBC supports the inclusion of the LEED Zero program in the bill, providing added value through third-party verification of a state net zero energy building. We note that the LEED Zero program includes four discrete certifications: Energy, Carbon, Waste, and Water; from our read of the bill, it intends to reference LEED Zero Energy.

USGBC also recommends amending the language in the bill that references LEED certification in the context of the defining "high-performance buildings." Specifically, we advise that the language on page 29, line 1-3 to read as follows: "(l) 1. earns a minimum of Silver certification under the current version of the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) rating system;". This change clarifies the law to be consistent with the current Maryland Green Building Council High Performance Green Building Program.

USGBC also supports the provisions of SB0414 requiring all commercial and residential buildings larger than 25,000 square feet to achieve high levels of energy efficiency, with those built after 2030 to be net zero energy. USGBC backs the bill's proposal to allow local jurisdictions to enact more stringent efficiency standards under the bill, and to require energy lifecycle cost estimates for new buildings.

Maryland is at a critical crossroads in addressing climate change, and USGBC commends the committee for taking up this essential legislation. By ensuring high levels of building performance, Maryland can ensure that it is well positioned to combat one of the greatest challenges of our time, climate change.

USGBC urges the swift passage of SB0414 with minor amendments and we offer our expertise in this area if needed.

Sincerely,



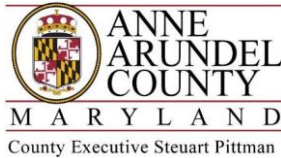
Alysson Blackwelder
Project Manager, Advocacy and Policy
U.S. Green Building Council
Bethesda, Maryland Resident



Anne Arundel County_FWA_SB414.pdf

Uploaded by: Johnston, Matthew

Position: FWA



January 28, 2021

Senate Bill 0414
Climate Solutions Now Act
Committee: Education, Health and Environmental Affairs

Position: FAVORABLE WITH AMENDMENTS

This bill provides a comprehensive strategy to combat greenhouse gas emissions that contribute to real, tangible climate change impacts facing current and future residents of Anne Arundel County. The Anne Arundel County Administration believes the bill's combination of energy efficient building standards, emission reduction targets, renewable energy incentives, fleet conversion requirements, aid to local governments and school districts and a groundbreaking urban and rural tree planting campaign represent the most comprehensive statewide strategy to date to reduce greenhouse gas emissions, lower temperatures in urban areas and usher in a new, greener and more resilient economy.

Climate change is having real, measureable impacts on Anne Arundel County residents and businesses today, and mitigating greenhouse gas emissions everywhere is critical to preventing even worse climate impacts for future generations. In 2019, the City of Annapolis recorded 18 high-tide, or "nuisance" flooding events. A 2019 report¹ by the National Oceanic and Atmospheric Administration (NOAA) predicts the City could experience such events every other day by 2050 due to rising sea levels. And the Maryland Department of Transportation estimates that many coastal communities within Anne Arundel County could find themselves within regulated floodplains due to sea level rise by 2050 and 2100.²

Comprehensive strategies, such as those called for in this bill, are needed to mitigate the harm climate change will have on our communities. Anne Arundel County has also taken steps to mitigate emissions locally, including recently passing legislation requiring the County to transition to zero-emission vehicles. However, these transitions are costly and will take a significant amount of time if additional funding is not provided to local governments. For this reason, the Administration encourages the sponsors and members of the Committee to consider amendments to the bill that would provide grants to local governments to fund fleet conversion infrastructure feasibility studies, charging infrastructure construction and the difference in costs between conventional and zero-emission vehicles.

For all these reasons, the Anne Arundel County Administration requests a **FAVORABLE WITH AMENDMENTS** vote on SB 0414.

¹ NOAA. 2019. 2019 State of US High Tide Flooding with a 2020 Outlook: NOAA Technical Report NOS CO-OPS 092. Available at: https://tidesandcurrents.noaa.gov/publications/Techrpt_092_2019_State_of_US_High_Tide_Flooding_with_a_2020_Outlook_30June2020.pdf.

² Maryland Department of Transportation. 2016. GIS Data Products to Support Climate Change Adaptation Planning: Anne Arundel County, Maryland. Available at: <https://www.esrgc.org/documents/resources/reports/GIS%20SLC%20Report%20-%20Anne%20Arundel.pdf>.

SB0414 CHESSA FWA.pdf

Uploaded by: Murray, David

Position: FWA



**Before the General Assembly of the State of Maryland
Senate Environment and Transportation Committee
January 28, 2021**

**Testimony of David W. Murray
Executive Director
Chesapeake Solar & Storage Association
SB 414: Climate Solutions Now Act of 2021
FAVORABLE WITH AMENDMENTS**

Thank you for the opportunity to provide testimony on SB 414. I serve as Executive Director of the Chesapeake Solar & Storage Association, CHESSA, formerly known as the Maryland-DC-Virginia Solar Energy Industries Association (MDV-SEIA). CHESSA is the local trade association representing over 4,500 solar installers, developers, manufacturers, and other solar workers in Maryland. Our members also provide energy storage solutions to households, businesses, schools, local governments, and utilities throughout the region. CHESSA is a recognized state affiliate of the Solar Energy Industries Association.

CHESSA is broadly supportive of this transformative legislation that places Maryland on a stronger path to addressing climate change. This legislation prioritizes equity and a just transition away from fossil fuels. These elements fundamental toward achieving a 100% clean energy economy. We applaud Senator Pinsky and fellow sponsors of this landmark legislation for their leadership and dedication toward our clean energy economy.

Given this legislation is broad in scope, the following testimony will solely comment on the parts of the legislation that directly affect the solar industry.

Solar-Ready Rooftops: CHESSA supports SB 414 encouraging solar-ready rooftops throughout the state. Given that the structure, shading and orientation of the roof may make a project infeasible, these provisions help facilitate greater rooftop solar deployment on new buildings. Not only will this save building owners – which often are the state or county– critical funds in the long term, but will help Maryland achieve its ambitious in-state solar energy goals by 2030.

CHESSA makes a minor recommendation to this section, adding on page 24, Line 2 “...panels-
AND PRIORIZES PANEL PLACEMENT ON THE SOUTH SIDE OF THE ROOF.”

Reallocation of SEIF Monies: SB 414 proposes to ringfence at least \$500,000 from renewable energy projects to the Healthy Soils Program. The Healthy Soils Program is in essence an agricultural program. Carbon sequestration is just one of several Healthy Soils Program goals, the first listed in its authorizing legislation is to “Improve the health, yield, and profitability of the soils of the State.” CHESSA does not believe that ringfencing funds from the SEIF is an appropriate use of the fund, as the Healthy Soils Program does not reduce fossil fuel consumption, reduce energy burdens on Maryland’s most vulnerable citizens, or increase clean energy generation. Given we are far from our 2030 goal of generating 50% of our electricity



from renewable resources, its vital we do not direct funds from clean energy deployment. CHESSA proposes striking Lines 14-17 on Page 35.

Community Solar Deployment: Since the community solar program's inception in 2015, solar developers have been unsure whether rooftop community solar arrays are exempt from personal property taxes. Given this financial uncertainty, many community solar projects have not been pursued on rooftops, as a personal property tax liability makes the project more expensive. Without clarification from the General Assembly, the association doubts that community solar developers will target rooftops for this type of deployment, due to the increased costs of installation.

Should the General Assembly clarify that all rooftop, brownfield, or canopy community solar arrays are exempt from personal property tax, it would facilitate greater deployment of projects of these types. We applaud SB 414 for including this important provision.

However, lines 24-27 on Page 39 solely apply this exemption to community solar arrays serving at least 51% of low- or moderate-income customers. The association believes all rooftop solar arrays should be exempt from personal property tax, regardless of the subscribers. Thus, CHESSA recommends striking "THAT SERVES MORE THAN 51% OF KILOWATT-HOUR OUTPUT TO LOW- OR MODERATE-INCOME CUSTOMERS, AS DEFINED IN REGULATIONS OF THE PUBLIC SERVICE COMMISSION."

Thank you for your consideration.

Sincerely,

David Murray
Executive Director
Chesapeake Solar & Storage Association (CHESSA, formerly MDV-SEIA)

SB414_2021_GRID-Alternatives-Mid-Atlantic-Alexandr

Uploaded by: Wyatt, Alexandra

Position: FWA



Maryland General Assembly
Senate Education, Health, and Environmental Affairs Committee
January 28, 2021

Testimony of Alexandra Wyatt
Policy Director and Legal Counsel
GRID Alternatives

SB 414, Climate Solutions Now Act of 2021
Sponsor: Senator Pinsky
Position: FAVORABLE WITH AMENDMENTS

Thank you for the opportunity to provide testimony on SB 414, the Climate Solutions Now Act of 2021. My name is Alexandra Wyatt and I am Policy Director and Legal Counsel for GRID Alternatives, the nation's largest nonprofit solar installer. Our affiliate GRID Alternatives Mid-Atlantic (GRID Mid-Atlantic) operates in Maryland, Virginia, and the District of Columbia, providing solar job training and no-cost solar installations to underserved and low-income customers. GRID Mid-Atlantic offers these comments in support of SB 414 and requests a **favorable** report in committee. We also offer for the Sponsor's and Committee's consideration some suggestions to further improve the equity and effectiveness of the bill.

GRID Mid-Atlantic's mission is to build community-powered solutions to advance economic, environmental, and climate justice through renewable energy. We envision a rapid, equitable transition to a world powered by renewable energy that benefits everyone. To achieve that transition, GRID Mid-Atlantic works exclusively with low-income and underserved communities to bring them the many benefits of solar and other clean energy technologies. These benefits include access to hands-on job training opportunities in fulfilling renewable energy careers, as well as lower energy burdens, reduced greenhouse gas emissions, and a cleaner, healthier environment.

GRID Mid-Atlantic strongly supports the Climate Solutions Now Act of 2021 and its more rapid greenhouse gas reduction goal. We particularly support the bill's requirements that the Commission on Environmental Justice and Sustainable Communities develop recommendations for identifying communities disproportionately affected by climate change; develop recommendations to address environmental justice concerns, reduce emissions of greenhouse gases and co-pollutants, and build climate equity and resilience within those communities; and set goals for the percentage of state climate funding that should be used for the benefit of these communities. GRID suggests that these recommendations and goals could be improved by clarifying that communities can be defined not only geographically but by circumstances, such as low income, that can affect families across Maryland.

We note that New York's Climate Leadership and Community Protection Act (CLCPA) separately defines "disadvantaged communities" as communities that bear various environmental burdens and possess certain socioeconomic criteria, or that comprise high-concentrations of low- and moderate- income



households. We believe that “or” is important so that fewer or no low-income households are left out. At the same time, community identification and prioritization of funds should also aim to ensure that it is actually the low-income households, or households, businesses, and organizations meeting other socioeconomic criteria, that receive the direct benefits—not higher-income households or businesses that are located in the same geographic areas. Greater clarity in the bill language could help guide the community identification recommendations toward these principles.

To further strengthen these provisions, goals for the percentage of state climate funding that should benefit these communities should be developed in conjunction with mechanisms for accountability to communities, to ensure that the goals are in fact met. Finally, this provision could be bolstered by interim provisions requiring agencies to use best efforts to prioritize state climate funding for low-income and disadvantaged communities immediately and while the Commission’s work is in progress.

GRID Mid-Atlantic also strongly supports the creation of a Just Transition Employment and Retraining Working Group. However, the prescriptive requirements on who shall be included omit organizations, like Power52 and GRID Mid-Atlantic, that bring clean energy industry training opportunities to some of the communities and individuals who have the greatest need for such opportunities and who are the most underrepresented in the clean energy workforce. These programs can provide access points to apprenticeships and unionized jobs that otherwise would not have as much reach into these communities. As an illustration, just across the Maryland border, GRID Mid-Atlantic is responsible for implementing the Solar Works DC low-income solar installation and job training program spearheaded by the Department of Energy & Environment (DOEE) and the Department of Employment Services (DOES).¹ By meeting trainees where they are and providing wraparound services, the program has helped trainees in a wide range of circumstances, including homelessness and post-incarceration reentry, start green career paths.²

GRID Mid-Atlantic opposes reallocation of clean energy program funds, including the Strategic Energy Investment Fund, toward soil or other non-energy-related programs. The Strategic *Energy* Investment Fund comes from and should promote energy initiatives. The Healthy Soils Program is not solely intended for carbon sequestration, as the first listed goal in its authorizing legislation is to “Improve the health, yield, and profitability of the soils of the State.” Thus, we respectfully urge the removal of this provision from the Climate Solutions Now Act, and maintenance of separate funding sources for the Healthy Soils Program.

GRID Mid-Atlantic is very pleased to see Maryland’s leaders prioritizing equity and environmental justice as the state looks to increase the ambition of its climate commitments to meet the needs of our moment. We thank you for your consideration of SB 414, and we hope that you will advance it.

¹ For more information on Solar Works DC, see <https://doee.dc.gov/service/solar-works-dc>, <https://gridalternatives.org/regions/midatlantic/solar-works-dc>.

² See, e.g., <https://www.streetsensemedia.org/article/solar-works-d-c-employment-green-energy/#.YA9g0-hKiUk>.

Jason Ascher - Oppose HB 414.pdf

Uploaded by: Ascher, Jason

Position: UNF

MID-ATLANTIC PIPE TRADES ASSOCIATION



**7050 Oakland Mills Road
Suite 180
Columbia, MD 21046**

**Phone: 410-290-3890
www.midatlanticpipetrades.org**

Maryland Senate – Education, Health, and Environmental Affairs Committee

TO: Chairman Pinsky, and Members of the Education, Health, and Environmental Affairs Committee

FROM: Jason Ascher, Political Director – Mid-Atlantic Pipe Trades Association

Oppose SB 414 – Climate Solutions Now Act of 2021

On behalf of the Mid-Atlantic Pipe Trades Association and our over 20,000 members and families from United Association Locals across Maryland, I ask that you **OPPOSE SB 414**.

This legislation appears to want to get Maryland to net-zero carbon emission by 2045 and protect the workers who will need to transition from building and maintaining this infrastructure with a “Just Transition.” The problem is it lacks in both areas.

To start, if the government wants us to transition from fossil fuel, then the government should lead. This legislation exempts most public schools and older government buildings from being retrofitted.

Second, you need to allow **all** renewable energy types like carbon capture and nuclear and not limit wind and solar options.

Finally, if you want to have a “just transition” for workers, you need to ensure funding to take care of workers. Retraining workers is all well and good, but workers in the fossil fuel industry typically earn \$40-\$60 per hour, while the jobs in renewable energy pay half that. You need to consider the workers that are close to retirement. These workers have spent decades working hard with the promise of a sound retirement. This legislation does not ensure the funding necessary to make sure these promises are not abandoned.

For the reasons discussed above, I ask you to oppose SB 414.

Sincerely,
Jason Ascher
Political Director
Mid-Atlantic Pipe Trades Association

Plumbers and Gasfitter Local 5 – Camp Springs, MD

Plumbers and Steamfitters Local 10 – Richmond, VA/Roanoke, VA

Plumbers and Pipefitters Local 110 – Norfolk, VA

Plumbers and Steamfitters Local 486 – Baltimore, MD

Plumbers and Steamfitters Local 489 – Cumberland, MD

Steamfitters Local 669 – Capitol Heights, MD

Road Sprinkler Fitters Local 669 – Columbia, MD

SB 414 - Climate Solutions Now Act - NAIOP Testimo

Uploaded by: Ballentine, Tom

Position: UNF



January 26, 2021

The Honorable Paul G. Pinsky, Chair
Senate Education, Health and Environmental Affairs
2 West, Miller Senate Office Building
Annapolis, MD 21401

Oppose: SB 414 – Climate Solutions Now Act of 2021

Dear, Chair Pinsky and Committee Members:

The NAIOP Maryland Chapters represent 700 companies involved in development and ownership of commercial, mixed-use, and light industrial real estate, including some of the largest property owners in the state. NAIOP's membership is comprised of a mix of local firms and publicly traded real estate investment trusts that are invested in the future of Maryland but also have experience in national and international markets.

Success in climate mitigation fits the ambition and values of commercial real estate. For decades, NAIOP's member companies have been dedicated to energy efficiency, conservation, and high-performance construction. That commitment is one of the primary reasons that for 20-years Maryland has been among the top ten states in the country for LEED certified buildings. This experience leads NAIOP to consider deep reductions in carbon emissions from buildings to be the most challenging of the sectors.

Meeting Maryland's 2050 greenhouse gas reduction goals in a way that is affordable to the consumer, maintains quality of life and ensures a stable transition of energy and economic markets will require coordinated action across every level of government, by utility operators, regulators, NGOs, consumer advocates, homeowners, and businesses.

NAIOP submitted testimony in support of the Greenhouse Gas Reduction Act [GGRA] in 2009 and again for its reauthorization in 2016. Senate Bill 414 proposes changes that are a material and consequential departures from the structure and provisions of the GGRA that allow the use of least-cost compliance options. NAIOP therefore cannot endorse SB 414 and offers the following information, and observations for the General Assembly to consider.

+ Zero Energy New Construction

The zero energy buildings requirement focuses on reduced energy use which diverts from measures of progress in the current GGRA that are based on reducing greenhouse gas emissions. Focusing on eliminating energy use will provide fewer emissions reductions at higher cost as utilities transition to low carbon electric generation.

Large buildings, and high energy uses like hospitals, data centers and restaurants will find it extremely difficult to reach Zero Energy balance. Large net zero energy buildings require plentiful, locally sourced, off-site wind, geothermal and solar energy. Integrating renewables at that scale will require significant advancements in renewable energy markets.

While the technologies exist to build net zero energy buildings under the right circumstances, the trade-offs make them impractical for widespread application across the entire market. To achieve necessary reductions in energy consumption, designers of net zero energy buildings often must reduce occupant density, move computer servers or laboratory equipment off-site, reduce the building footprint or put limitations on the type of tenant uses. Broadly applied, the net effect would be under utilization of building sites and under build of job centers.

The phase in periods of below code energy requirements effectively decouple Maryland from the national building codes. This will leave state and local codes officials and building designers to create the code compliant pathway to progressively lower energy use. Even states with long experience writing and administering their own building codes have found this difficult.

+ Deep Energy Retrofit Requirement

The 40% energy reduction requirements for existing buildings will be extremely difficult for recently built, higher performing buildings to meet.

This section raises questions about how easily a major renovation would be triggered as there are various definitions used by Maryland jurisdictions.

On-site power alternatives include more than rooftop solar and there are multiple issues related to the solar ready concept that raise concerns. One group is related to the readiness of equipment and conduit installed perhaps many years before any decision is made about when to install and whether equipment might best be located elsewhere on-site such as parking areas.

The requirement would encumber roof space that is often used for other equipment that cannot be located on the ground, tenant amenities or skylights that help reduce lighting requirements.

The relationship between the roof area and floor area / energy use on a 20-story building is much larger than what our members consider to be a good candidate for rooftop solar. Solar on a building of this size would not provide meaningful amounts of power.

We are still monitoring events related to solar markets net metering, virtual net metering and battery storage and utility pricing that affect the feasibility of on-site solar for commercial buildings.

The 15-year payback is generally three times longer than industry standard return on investment.

+ **Reduced Role of Climate Commission and GGRA Quality Assurance Provisions**

Passing SB 414 would make moot the Climate Commission's recommended workplan for developing a cost-effective emissions reduction strategy for the building sector. During 2020 climate commission held a series of subgroup and working group meetings on energy use and emissions in the building sector. The [Commission's work plan for 2021 includes a series of recommended actions](#) related to reducing emissions from the building sector, including:

1. Allowing utility incentive programs to pay for reducing emissions via fuel switching of space and water heating equipment.
2. Commissioning a study of the market potential and consumer economics of building electrification examining incremental first costs payback periods, appropriate incentive levels and the greenhouse gas reduction potential.
3. Producing an energy transition plan for the building sector by the end of 2021.

The net zero energy new construction and energy retrofit requirements were not presented as part of the commission's 2020 work. The economic and emissions outcomes have not been modeled. By mandating means and methods, limiting technologies, and setting a Maryland cost of carbon, the bill by-passes provisions in ENV 2-1206 that require an MDE feasibility analysis as well as the allowed use of alternative compliance mechanisms such as offsets and credits or technologies including carbon sequestration.

+ **Net Zero Emissions and the Need for Carbon Capture or Other Advanced Technologies**

Preventing access to technologies, narrowing the set of compliance options, and limiting location choices will unnecessarily increase compliance costs and slow progress. IPCC model runs, the academic literature and numerous technical studies make clear the need to preserve the option to use a full range of future technologies related to carbon capture, nuclear, green hydrogen, bio, synthetic and natural gas technologies. [A recent study](#) by Energy and Environmental, Economics of least-cost carbon reduction policies in the PJM utility service territory found, *"Reaching the end points of many "100%" goals being set today may require carbon capture and sequestration, new nuclear generation, new sources of renewable biogas or hydrogen fuels or other forms of clean generation that while technically achievable are not commercially available today. Achieving absolute zero carbon emissions requires one or more of these resources to become available."*

On behalf of our member companies, I want to reiterate NAIOP's commitment to working with the General Assembly and other stakeholders to meet the challenges presented by the Maryland's climate mitigation goals.

Sincerely,



Tom Ballentine, Vice President for Policy
NAIOP Maryland Chapters -*The Association for Commercial Real Estate*

cc: Senate EHEA Committee Members
Nick Manis – Manis, Canning Assoc.

SB 414 Opposition.pdf

Uploaded by: Clark, Tom

Position: UNF



International Brotherhood of Electrical Workers

GEORGE C. HOGAN: Business Manager • THOMAS C. MYERS: President • RICHARD D. WILKINSON: Vice President
JOSEPH F. DABBS: Financial Secretary • RICHARD G. MURPHY: Recording Secretary • PAULO C. HENRIQUES: Treasurer



TESTIMONY IN OPPOSITION TO SB 414 Climate Solutions Now Act of 2021 January 26, 2021

To: Hon. Paul G. Pinsky, Chair, and members of the Education, Health, and Environmental Affairs

From: Tom Clark, Political Director, IBEW Local 26

Mr. Chair and members of the committee, I ask that you consider my opposition to SB 414. This bill, as written, poses several problems. Most obvious is the fact that the State Government seems to exclude itself and its projects from the “climate solutions” that this bill imposes on the private sector. Where is the leading by example that we expect from our State government and its leaders?

This bill excludes all schools (minus one per county) and highway projects. Basically, all State projects. Where is the leadership? This bill has set a standard for all to comply, except for the State. It also excludes warehouses, maintenance facilities, transmitter buildings, pumping stations. If you would like to make commercial office buildings your focus, please just write it in the bill.

A major concern of mine is the power plant issue. Looks like you are seeking a date to close these plants and the well-paying jobs that are involved. There is already a Fossil fuel bill that the Assembly is trying to pass. SB 414 is the same bill with autos and tree planting covering up the power plant issue. Forget seeing the forest thru the trees. In this bill, I can't see the power plants thru the trees. I see this bill as eliminating IBEW jobs, good paying jobs. The IBEW and its members are ready and trained for the green economy. However, until you can store solar energy, Maryland is not ready. I suggest you wait until science and invention catch up to your green goals. By closing down power plants in the area, we will just be consuming fossil fuel generated power from neighboring states (Pennsylvania and West Virginia) for 10 or more years, until technology catches up. Buying power from neighboring states is not a solution. Smog knows no borders!

I am worried about other issues that arise from this bill. Labor and the IBEW are included in the workgroup, however left absent from the commission. On page 13, the commission claims to: solicit input from all segments of the population that will be impacted. The women and men of the IBEW will be impacted, as well as their families. Also, on page 29, to use the term major renovation is extremely vague. Please define “major renovation”.

Although I am very much against this bill as written, I would like to acknowledge your effort to make the environment safer for all. I just think you are seeking a local solution to a national and global problem. I would also like to repeat that the State of Maryland needs to lead by example and not exempt itself from the very bill that you have filed. I respectfully ask that you **oppose** bill SB 414.

Tom Clark, IBEW member and proud Marylander





International Brotherhood of Electrical Workers

GEORGE C. HOGAN: Business Manager • THOMAS C. MYERS: President • RICHARD D. WILKINSON: Vice President
JOSEPH F. DABBS: Financial Secretary • RICHARD G. MURPHY: Recording Secretary • PAULO C. HENRIQUES: Treasurer



Chartered 1892
Washington, D.C.



SB 414 Oppose Climate Solutions Now Act of 2021.pd

Uploaded by: Demchuk, Pete

Position: UNF

INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS - LOCAL UNION No. 24

AFFILIATED WITH:

Baltimore-D.C. Metro Building Trades Council — AFL-CIO
Baltimore Port Council
Baltimore Metro Council — AFL-CIO
Central MD Labor Council — AFL-CIO
Del-Mar-Va Labor Council — AFL-CIO
Maryland State - D.C. — AFL-CIO
National Safety Council



AFL-CIO-CLC

BALTIMORE, MARYLAND 21230

JOHN L. RANKIN, President
DAVID W. SPRINGHAM, JR., Recording Secretary
MICHAEL J. McHALE, Financial Secretary
PETER P. DEMCHUK, Business Manager

OFFICE:
2701 W. PATAPSCO AVE
SUITE 200

Phone: 410-247-5511

FAX: 410-536-4338

Written Testimony of

Peter Demchuk, Business Manager, IBEW LOCAL 24

Before the

Education, Health, and Environmental Affairs Committee On

SB 414 – Climate Solutions Now Act of 2021

OPPOSE

January 26, 2021

Dear Chairman Pinsky and Committee Members,

Thank you for the opportunity to submit my written testimony opposing SB 414.

For the record, my name is Peter Demchuk. I am a 41- year member, and the Business Manager, of the International Brotherhood of Electrical Workers, Local 24 located in Baltimore. I represent approximately 2,000 hardworking, Maryland tax paying electricians. I am a lifelong resident of Maryland and reside in District 7 of Baltimore County.

Although we find the promise of the bill alluring, we are opposed to it. It's a large bill with many components we feel cannot be adequately addressed in a bill of this complexity. An immediate issue of concern is loss of jobs for our fellow citizens. These losses are not effectively addressed in the proposed workgroup and just transition language. We are talking about Marylanders economic futures. Forming a workgroup and ensuring the working lives of those affected by this bill are two different things.

In light of the complexity of the issues the bill is addressing we urge you give this bill an unfavorable vote and not pass it out of committee.

Thank you,

Peter P. Demchuk

PPD:clr
AFL-CIO
OPEIU # 2

SB 414 - Climate Solutions Now Act of 2021.pdf

Uploaded by: Edwards, Donna

Position: UNF



ARYLAND STATE & D.C. AFL-CIO

AFFILIATED WITH NATIONAL AFL-CIO

7 School Street • Annapolis, Maryland 21401-2096

Office. (410) 269-1940 • Fax (410) 280-2956

President

Donna S. Edwards

Secretary-Treasurer

Gerald W. Jackson

SB 414 – Climate Solutions Now Act of 2021
Senate Education, Health, and Environmental Affairs Committee
Senate Budget and Taxation Committee
January 28, 2021

OPPOSE

Donna S. Edwards
President
Maryland State and DC AFL-CIO

Chairs and members of the Committees, thank you for the opportunity to submit testimony in opposition to SB 414 – Climate Solutions Now Act of 2021. My name is Donna S. Edwards, and I am the President of the Maryland State and District of Columbia AFL-CIO. On behalf of the 340,000 union members, I offer the following comments.

SB 414 is an enormous bill, affecting nearly every sector of Maryland’s economy. From planting trees to cleaning up the Bay, from electric vehicles to energy generation, this bill leaves no corner of the State untouched in its effects. We realize that is by design, and that the call for “bold” action on Climate Change is reaching a fevered pitch.

We agree that the time to act on climate is now. It is no coincidence that the building trades unions in Maryland have had clean energy training – specifically in solar and wind – for their Apprenticeship programs since 1999. Maryland’s Building and Construction Trades Unions have led the way in quality training on the construction and installation of renewable energy generating facilities. They know the future of work in the construction of alternative energy is towards a cleaner future and are planning accordingly. However, unions also understand that to navigate this path requires equally bold thinking and action in creating and maintaining high-quality jobs with benefits. We cannot sacrifice the livelihoods of workers in pursuit of a clean energy future. A clean future needs to coincide with a bright future for workers. To do anything less is to engender anger and resentment at the loss of high road jobs and decline in standard of living, inviting a backlash against and less money to contribute to the very thing that we all agree should be our goal: A sustainable clean environment and reversal of Climate Change for the generations that follow behind us, and a vibrant economy that values the dignity of work.

SB 414 is very heavy on the former and exceptionally light on the latter. While there are multiple instances within the bill of audacious environmental policies, it pays short shrift to all the

workers that currently provide us with the vast majority of energy needs. While it does create a new working group ostensibly titled the “The Just Transition Employment and Retraining Working Group”, its charge is limited, and there is no actual commitment or discussion to a Just Transition. It leaves thousands of workers that are within a decade or less of retirement in the lurch, scrambling to figure out how to make their pensions – of which they have paid into for years – whole, as well as trying to cobble together stop-gap work to maintain their living standards and make it until retirement. There is no mention of loss of or provision for health care for workers losing their jobs or being retrained. The workgroup as described should be titled “The Retraining Working Group” because that is its only focus.

We need to have a sincere discussion about what a Just Transition would look like in Maryland. It will require the political resolve of the Maryland General Assembly to dedicate real money and real resources to keep workers whole in the face of a changing energy landscape. And in the absence of setting up a real Just Transition, we cannot simply charge ahead with liquidating good-paying jobs for Maryland.

As described in a recent white paper, *Transitioning to a 21st Century Energy System*¹, “a Just Transition is achieved when dislocated workers and host communities are left unharmed by the closure of a power plant. This means that workforce transition plans are developed and implemented and that workers receive wages and benefits while looking for a new job or training for a new career in an emerging sector. That new opportunity for work keeps the worker within the community that he or she resided in when their job at the power plant ended. That new job has the same labor standards, collective bargaining rights, and upward career mobility as the one that preceded it.”

SB 414 ultimately burns down the bridge before the tunnel is built. As of January 26, under the PJM, 107,556 MWs are being used, with only 6,772MWs coming from existing renewable energy sources. Only 6% of our energy is being produced by renewable energy. If we are serious about environmental policy in Maryland, then our legislation should reflect that by focusing on building the necessary base load energy before turning off other sources. It should be focused on incentivizing renewable energy production that also creates high-quality, family sustaining jobs.

We cannot make a choice between the environment and good jobs. We must do both.

We ask for an unfavorable report on SB 414.

¹ *Transitioning to a 21st Century Energy System*, RossGould, Esq., WDI; Ellen Redmond, IBEW; Lara Skinner, PhD, Cornell U ILR School, July 2019

SB 414 - IBEW 307 - Rodney Rice.pdf

Uploaded by: Edwards, Donna

Position: UNF



International Brotherhood of Electrical Workers

A.F.L. – C.I.O. – C.F.L.

Local Union No. 307

401 Decatur Street - Cumberland, MD 21502

301-724-3403 Fax 301-724-2722



Rodney E. Rice – Business Manager

www.ibew307.org

George A. Koontz - President

January 27, 2021

To: Education, Health, and Environmental Affairs

From: International Brotherhood of Electrical workers L.U. 307

Subject: SB 414

Position: oppose

Dear, Honorable Chairman Pinsky, and Committee.

I am the Business Manager of the IBEW L.U.307 out of Cumberland MD. I strongly oppose the SB414. I do not feel that the jobs that this bill may develop will be able to be transitioned into other jobs that will pay the same or have the same benefits and provide health care for the members and there families as they exist now.

Once again we strongly oppose SB 414 and ask the committee to give it unfavorable vote.

Respectfully,

Rodney Rice
IBEW L.U. 307
Business Manager



International Brotherhood of Electrical Workers

A.F.L. – C.I.O. – C.F.L.

Local Union No. 307

401 Decatur Street - Cumberland, MD 21502

301-724-3403 Fax 301-724-2722



Rodney E. Rice – Business Manager

www.ibew307.org

George A. Koontz - President

January 27, 2021

To: Budget and Taxation Committee

From: International Brotherhood of Electrical workers L.U. 307

Subject: SB 414

Position: oppose

Dear, Honorable Chairman Guzzone, and committee.

I am the Business Manager of the IBEW L.U.307 out of Cumberland MD.

I strongly oppose the SB414. I do not feel that the jobs that this bill may develop will be able to be transitioned into other jobs that will pay the same or have the same benefits and provide health care for the members and there families as they exist now.

Once again we strongly oppose SB 414 and ask the committee to give it unfavorable vote.

Respectfully,

Rodney Rice
IBEW L.U. 307
Business Manager

MBIA Testimony SB 414.pdf

Uploaded by: Graf, Lori

Position: UNF

January 28, 2021

The Honorable Paul G. Pinsky
Senate Education, Health & Environmental Affairs Committee
Miller Senate Office Building,
2 West Wing 11 Bladen St.,
Annapolis, MD, 21401

RE: SB 414 – Climate Solutions Now Act of 2021

Dear Chairman Pinsky:

The Maryland Building Industry Association, representing 1,100 member firms statewide, appreciates the opportunity to participate in the discussion surrounding **SB 414 – Climate Solutions Now Act of 2021**. MBIA **Opposes** the Act in its current version.

This Bill would make numerous adjustments to the state climate and energy infrastructure in order to meet the new target goal of net zero emission by 2045. MBIA appreciates that climate change is an existential threat to the future of humanity on planet earth. However Maryland already has ambitious goals to reduce carbon emissions by 60% from 2006 levels by 2030 and we have not yet achieved that goal. Reaching net zero by 2045 is an unrealistic timeline considering the number of buildings, the type and cost of renovation, and the human costs of such a program.

The requirement that buildings meet net zero requirements would represent a substantial cost to the local and state governments that paid for the projects. During a period where revenue for both levels of government is diminished by the COVID-19 pandemic, this program would represent a huge financial commitment without the financial resources to achieve the stated goals.

The requirement that local jurisdictions must make life cycle estimates for new buildings will be partly or wholly passed on to the builders through new fees, which will in turn create an additional price increase for commercial real estate. This will ultimately have a detrimental effect on the economic health of local jurisdictions and create additional compounded costs by causing project delays and new required filing and paperwork for developers. What appears to be a small cost by itself will be very large in aggregate.

While we agree that climate change needs to be a priority, so does housing and housing affordability. The state of Maryland currently has a housing affordability crisis. Tax credits at the local, state, and federal levels are powerful tools to incentivize early adoption of many energy efficiency programs. Builders require a level playing field and need the support of industry and government. When given this support through voluntary programs, they will create housing that achieves Net Zero Energy Standards. Some of these standards will increase the cost of new housing by thousands of dollars. According to a 2020 National Association of Home Builders (NAHB) for each \$1000 increase in the price of a median priced new home, 2,881 Marylanders will be priced out of the market. We need to find a balance between housing affordability and climate change. We look forward to working on this issue in the future.

For these reasons, MBIA respectfully requests the Committee give this measure an unfavorable report. Thank you for your consideration.

For more information about this position, please contact Lori Graf at 410-800-7327 or lgraf@marylandbuilders.org.

cc:

SB 414_Climate_Solutions_Now_Act of 2021_UNFAV.pdf

Uploaded by: Griffin, Andrew

Position: UNF



LEGISLATIVE POSITION:

UNFAVORABLE

Senate Bill 414

Climate Solutions Now Act of 2021

Senate Education, Health, and Environmental Affairs Committee

Thursday, January 28, 2021

Dear Chairman Pinsky and Members of the Committee:

Founded in 1968, the Maryland Chamber of Commerce is the leading voice for business in Maryland. We are a statewide coalition of more than 5,000 members and federated partners, and we work to develop and promote strong public policy that ensures sustained economic recovery and growth for Maryland businesses, employees, and families.

At 52 pages, SB 414 is an extensive and dense piece of legislation proposing major changes to Maryland's policies relating to the emission of greenhouse gas. Despite the many different and worrisome proposals, the Maryland Chamber of Commerce has three primary concerns with SB 414 as introduced.

1. Maryland's existing climate plans are required to achieve the greenhouse gas reduction target while simultaneously increasing jobs and economic benefits. The current plan meets that standard and is therefore a win-win for Maryland. SB414 changes the current standard in two ways. First, it assumes that there is a "social cost" of carbon estimated at \$50 per ton. This cost estimate means that any requirement adopted from this legislation which would result in lost jobs or lost benefits to the economy is a net positive so long as each ton of carbon reduced is less than \$50. As a result of this tradeoff, we can expect more measures to be adopted that have a negative impact on jobs and benefits. Additionally, instead of measuring jobs and benefits with or without the measures proposed, the new language compares the jobs and benefits to a "no-action scenario." It is not clear what the bill means by a no-action scenario. However, if the no-action simply means no-action by Maryland, the truth is that Maryland's contribution to global greenhouse gases is not material. If the intent is to compare jobs and economic impacts to a global climate catastrophe than any measure, no matter how draconian, will be a positive.

SB 414 essentially eliminates the requirement that the plan result in a net economic benefit to the State's economy and a net increase in jobs.

2. The bill has extensive, and extremely expensive, requirements for new and renovated commercial buildings. The proposed standards in SB 414 are much stricter than called for by international building codes and stricter than any of our nearby competing states. Placing extremely expensive requirements on commercial buildings during a time when that sector is under enormous pressure from the fallout of the COVID-19 pandemic while future recovery remains very uncertain would be a questionable policy choice.
3. Finally, while the fiscal note was not made available by the time testimony was required to be submitted, SB 414 mandates much more expensive school construction and the procurement in more expensive state vehicles and buses. The costs of SB 414 are likely to be immense. Unfunded mandates like many of those in SB 414 seem to make for poor budgetary policy in a time of future fiscal uncertainty.

For these reasons, the Chamber respectfully requests an **unfavorable report** on SB 414.



SB 414 - UA 486 - Gerald Jackson.pdf

Uploaded by: Jackson, Gerald

Position: UNF



PLUMBERS AND STEAMFITTERS
UA LOCAL UNION 486
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Baltimore, Maryland 21236
Phone: 410-866-4380
Fax: 410-933-3515
www.UALocal486.com

Founded 1889

William L. Welsh
Business Manager

Gerald W. Jackson
Assistant Business Manager

Gary G. Glab
Financial Secretary

Andrew R. Gannon III
Business Agent

Harry M. Schleicher Jr.
Business Agent

Nicholas W. Cummings
Business Agent

Todd E. Eckley
Recruiter

SB 414 – Climate Solutions Now Act of 2021

Date: January 28, 2021

To: Chairman Pinsky, Committee Members of the Education, Health and Environmental Affairs

Chairman and Committee members, thank you for the opportunity to provide testimony in opposition of SB 414. My name is Gerald Jackson, and I am the Assistant Business Manager for the Plumbers & Steamfitter's UA Local Union 486 in Baltimore, Maryland and I'm also the Secretary- Treasurer for the Maryland State and D.C. AFL-CIO and on behalf of the more than 340,000 union members in the state of Maryland, I offer this testimony.

This legislation appears to have a goal of net-zero carbon emissions by year 2045 and protect the workers who will need to transition from building and maintaining this infrastructure with a "Just Transition". I think we have missed the mark in both areas.

If we're being asked to transition from fossil fuel, then the government needs to lead by example: Why does this legislation exempt most public schools and older government buildings from being retro-fitted? Why isn't Carbon Capture and Nuclear being considered as a form of renewable energy along with Wind and Solar Power? Research shows that 30%-40% of Maryland's energy is imported from other states. The states that provide our grid with electric power use fossil fuel sources (Coal Nat. Gas and Nuclear) to supply Maryland with our much needed energy demands. Conversely those states – Pennsylvania, West Virginia, Ohio, Illinois and Indiana still employ workers in the fossil fuel industry who make good wages and benefits.

Just Transition is a means to replace one industry with another without losing Life Sustaining Wages and Benefits. I'm afraid that this bill leaves a lot to be desired.

For these reasons I'm asking for an unfavorable report **for SB 414.**

Respectfully Submitted,

Gerald Jackson – Secretary- Treasurer Md. State & D.C. AFL-CIO
Assistant Business Manager Plumbers & Steamfitter's UA Local 486

Testimony SB-414 Climate Solutions Now Act of 2021

Uploaded by: Kasecamp, Larry

Position: UNF

LARRY KASECAMP
Legislative Director

THOMAS CAHILL
Assistant Director

JOHNNY WALKER
Secretary



11505 Caboose Road, SW
Frostburg, MD 21532
PH: 301-697-2695
utusldmd@gmail.com

ANNAPOLIS OFFICE
176 Conduit St., Suite 206
Annapolis, MD 21401-2597

January 26, 2021

The Honorable Paul Pinsky, Chairman
Members of the Education, Health & Environmental Affairs Committee

RE: Oppose SB-414

REPRESENTATIVES

CUMBERLAND
Local 430
VACANT

Local 600
JASON WEAVER

BRUNSWICK
Local 631
TOM CAHILL

EDMONSTON
Local 1470
KENZELL CRAWFORD

BALTIMORE
Local 610
JOHNNY WALKER

Local 1949
ERIC BILSON

As the Maryland Legislative Director for the Transportation Division of the International Association of Sheet Metal, Air, Rail and Transportation Worker's (SMART) and on behalf of our members we would like to express our opposition to SB-414 as currently written.

We are the largest rail labor union in North America. Our members in Maryland are employees of CSX, Norfolk Southern Railway, Amtrak, Bombardier (MARC Service) and the Canton Railroad and work as conductors, engineers, switchmen, trainmen, utility persons and yardmasters. Our members operate freight and passenger trains that travel throughout the State of Maryland and throughout the Northeast Rail Corridor. SMART represents over 216,000 members throughout the country.

SB-414 would require the State to reduce statewide greenhouse gas emissions by 60% from 2006 levels by 2030, require the State to achieve net-zero statewide greenhouse gas emissions by 2045 and require the Maryland Department of Labor to adopt regulations establishing certain energy conservation requirements. These are all laudable goals that we support, but how we get there and who suffers the consequences along the way is the problem.

As a representative of workers, I can tell you the most important thing next to their safety in the workplace is job security. When legislation will have an affect on who gets to remain employed once it's implemented it requires great scrutiny. What's missing in this legislation is a real answer as to what a just transition is to an affected worker. You can establish all the committees and study groups you want to evaluate the affects, but to support legislation on a promise of a just transition without defining it would be imprudent. If it is the legislature's intent to proffer bold legislation that will drastically impact working families, the legislature should be bold enough to accept responsibility and define a just transition within the legislation.

Also, carbon capture processes are a promising technology. To eliminate its affect as part of a greenhouse gas emission reduction measure would be imprudent too. Technologies that are focused on improving the quality of air, water and the like should be encourage not excluded.

Thank you for your time and consideration of our position on this matter.

Sincerely,

Lawrence E. Kasecamp
MD State Legislative Director
SMART Transportation Division

SB 414.pdf

Uploaded by: May, Lisa

Position: UNF



Senate Bill 414 – Climate Solutions Now Act of 2021

Position: Oppose

SB 414 would require newly constructed commercial buildings to meet increasing energy usage reductions, resulting in a net zero energy balance by 2033. It would also require substantial commercial renovation projects to achieve significant reductions in energy usage. Maryland REALTORS® are concerned about the ability of commercial real estate projects to meet these demands in the current market.

In contrast to other real estate sectors, commercial real estate has been hit hard by the COVID-19 pandemic. Commercial lending volume decreased approximately 60% in 2020, and lender losses in the commercial sector exceeded those of the 2008 financial crisis. National economists also predict short-term price declines for retail, office, and hotel properties of 4-7%. As a result, lenders are expected to be more selective and conservative in financing commercial projects going forward.

The requirements of SB 414 will make the approval of commercial projects even more difficult. The upfront costs to construct a net-zero commercial building can be up to 15% more than conventional construction. A combination of increased construction costs and decreased lending availability will reduce the financial viability of certain projects. That includes those like adaptive reuse of existing structures which are a growing component of successful smart growth and urban renewal efforts.

The mandates for commercial real estate in SB 414 can harm the recovery of the commercial real estate sector. For this reason, REALTORS® must request an unfavorable report.

For more information contact bill.castelli@mdrealtor.org, susan.mitchell@mdrealtor.org, or lisa.may@mdrealtor.org

sb 414_BFP on behalf of BOMA_opposed.pdf

Uploaded by: Popham, Bryson

Position: UNF

Bryson F. Popham, P.A.

Bryson F. Popham, Esq.

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January 26, 2021

The Honorable Paul G. Pinsky, Chairman
Senate Education, Health, and Environmental Affairs Committee
2 West Miller Senate Office Building
11 Bladen Street
Annapolis, MD 21401

RE: Senate Bill 414 - Climate Solutions Now Act of 2021 - UNFAVORABLE

Dear Chairman Pinsky and Members of the Senate Education, Health, and Environmental Affairs Committee:

I am writing on behalf of the Building Owners and Managers Association (BOMA), in opposition to Senate Bill 414.

BOMA is a trade association that represents the interests of commercial and real estate owners, real estate professionals and our associate members through effective leadership in advocacy, collection and dissemination of industry information, education, community involvement, membership participation, and professional development.

Furthermore, BOMA acknowledges the leading role that Maryland has taken among states in addressing the broad issue of climate change, with a series of legislative enactments intended to promote sustainability and to improve the environment in which all Marylanders must live. These actions include the creation of the Maryland Commission on Climate Change (Commission), which has become a guiding force for State policy on this subject. BOMA has itself been an industry leader in this effort, both in the state and through its national organization, the Building Owners and Managers Association International (BOMI).

The Commission issued its most recent annual report on November 15, 2020. The report noted "the escalating urgency of climate change," and it is fair to say that one central recommendation from the report is embodied in SB 414: that the State achieve net-zero greenhouse gas emissions by 2045. Another central recommendation of the report, that the state achieve a statewide emissions reduction goal of 50% (from 2006 levels) by 2030 has been changed in the bill to a 60% reduction. By the report's own characterization, these and other ambitious recommendations are being treated by the Maryland Department of the Environment (MDE) as "stretch targets." The report also notes that MDE must submit, in 2022, a "progress report on the state GHG reduction efforts *and the economic impact of the GGRA of 2016 Plan*". Finally, the report cites the General Assembly's power to "maintain, revise, or eliminate" the 2030 goal and consider whether to continue economic impact provisions. In other words, the General Assembly will certainly be active in addressing this important subject continuously over the next several years.

No reasonable person disputes the serious problem of climate change, and that our government has an obligation to analyze it and act accordingly. The Commission was established for that purpose, and it is fulfilling its role. The General Assembly must also take into account, however, the impact that enacting Commission recommendations into law will have on our citizens. It is a constant balancing act for which the stakes are high on both sides.

With respect to the commercial buildings that form the core of BOMA members' assets, they comprise the workplaces of most of our State economy throughout Central Maryland. Our experience with economic upheaval caused by the pandemic over the last year illustrates how government action can significantly disrupt the lives of our citizens in important ways. Our State and local governments continue to struggle to achieve a balance between rational public health practices and the orderly conduct of business and personal life in Maryland.

The same balancing act will be needed in dealing with climate change. One laudable idea for this problem is another Commission recommendation, found on page 31 of the report, to revive an interagency task force whose objective is to coordinate across programs, policies and funding streams, an effort to retrofit Maryland's existing residential and commercial buildings to achieve healthier, safer, more efficient, and climate-friendly homes and businesses (Commission report, pp31-32). At a time when many buildings owned and operated by BOMA members have been vacant for a year, or nearly so, when the ability of tenants to pay rent is in question, and, most important, when the future use of these buildings is being considered by the owners, imposing the ambitious goals at the heart of SB 414 is premature. As a society, we must spend the balance of 2021 working through this incredibly difficult time, and BOMA members must decide how their buildings will be used in the future. Those uses will have a direct and material impact, in turn, on energy usage, emissions, and the production of greenhouse gases.

For these reasons, BOMA respectfully requests an unfavorable report on Senate Bill 414.

Very truly yours,

A handwritten signature in black ink, appearing to read "Bryson Popham". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Bryson F. Popham

cc: Kevin Bauer
Joan Smith

WGL testimony SB414 - Climate Solutions Now Act of

Uploaded by: Smith, Brian

Position: UNF

Education, Health, and Environmental Affairs
01/28/2021

Senate Bill 414 – Climate Solutions Now Act of 2021
POSITION: OPPOSE

While this legislation would impact just about every corner of Maryland’s economy, we’d like to focus on the proposed social cost of carbon on page 18, which would be “at least \$50 per ton of carbon dioxide equivalent”.

For this Committee’s review, we projected the impact on natural gas customers by using the average annual natural gas used from October 2018 through September 2019 by Washington Gas customers. We used this figure to calculate the associated carbon emissions (in metric tons). From there, we placed a \$60 per metric ton cost to determine the impact on Maryland homes and businesses:

	\$60/metric ton carbon tax impacts	
	<i>\$ Annual Increase</i>	<i>% Annual Increase</i>
Residential	\$250	29.9%
Commercial	\$5,786	35.1%
Interruptible	\$206,875	50.9%

As the Committee can see from the chart above, for the average homeowner and business this will increase their energy costs significantly.

Sustainability is a core value at WGL, as is the need to provide affordable and resilient energy. We strive to be responsible stewards of the environment, be active members of the communities we serve and provide clean energy solutions to customers. We believe that making sound investments today can help consumers find a better path tomorrow.

For example, through our Maryland Strategic Infrastructure Development and Enhancement Plan (STRIDE), we are authorized to accelerate replacement of targeted pipes for safety and environmental reasons reducing emissions throughout Maryland. We currently have 14 STRIDE projects underway across the state of Maryland. As of 2018, Washington Gas has replaced 21,657 miles of mains and services and will have reduced state GHG emissions by 32,000 metric tons because of these infrastructure enhancements.

That is equivalent to:

- 3,579,000 gallons of less gasoline used
- 6,752 fewer passenger vehicles on the road
- 3,810 homes’ energy use avoided per year

- 73,640 barrels of oil avoided

With almost half a million customers in Maryland, we take pride in our company's ability to provide energy to families and businesses in six counties throughout the state. On behalf of our employees and customers across Maryland, we ask for an unfavorable report on SB 414.

.....
Brian Smith, State Government Relations and Public Policy Manager
M 202.945.7140 | bsmith@washgas.com



SB414_LOI_MDE.pdf

Uploaded by: abbott, tyler

Position: INFO



January 28, 2021

The Honorable Paul G. Pinsky, Chair
Education, Health, and Environmental Affairs Committee
Miller Senate Office Building, Suite 2W
Annapolis, Maryland 21401

Re: Senate Bill 414- Climate Solutions Now Act of 2021

Dear Chairman Pinsky and Members of the Committee:

The Maryland Department of the Environment (MDE or the Department) has reviewed Senate Bill 414 - *Climate Solutions Now Act of 2021* and would like to offer additional information about the legislation.

The Department strongly supports the bill's overall objective to reduce greenhouse gas (GHG) emissions. Climate change is an urgent threat, and all levels of government and nongovernment organizations must take increasingly aggressive and balanced actions to reduce GHG emissions and increase community resiliency. Maryland is a national leader in this area, realizing substantial reductions in emissions since the first Greenhouse Gas Reduction Act (GGRA) was passed in 2009, with the Hogan Administration taking bold new actions to achieve significant progress. The World Resources Institute recently recognized Maryland's leadership with their finding that Maryland was the number one state for reducing GHG emissions while growing our economy.¹ While the Department welcomes efforts to accelerate action to combat climate change, we would like to provide information and express some concerns with the bill as currently drafted.

Overall

The Department has some concerns with the language changes to existing law. The language in the 2009 GGRA and 2016 GGRA was the result of a very comprehensive process that resulted in strong environmental protection and economic growth. Those bills were agreed upon by a wide array of interested parties, including environmental advocacy groups, labor and industry representatives, state agencies and public citizens. Some of the language changes to the existing GGRA that are proposed by this bill threaten to unravel the consensus underlying current law. Other language changes to the current law are vague and ambiguous or seem to provide for what is already implemented under current law, such as the requirement to "ensure that the greenhouse gas emissions reduction measures implemented in accordance with the plans: produce a net economic benefit to the State's economy and a net increase in jobs in the State, as compared with a no-action scenario."

The bill declares new goals to achieve a 60% reduction in statewide GHG emissions by 2030 and net zero GHG emissions by 2045. While the Department generally finds more ambitious goals to be laudable, the Committee should be aware that developing a plan for Maryland to achieve those goals through state programs while still meeting the law's requirements for economic impacts will be difficult and may even be impossible. Such rapid reductions will require improvements in federal programs to advance new technologies and make major infrastructure investments, and those improvements may be beyond what the incoming federal administration will put forward. The Department believes that such federal action is necessary and long overdue, but when developing a state plan, the Department cannot assume that federal action at that scale will occur.

¹ <https://www.wri.org/blog/2020/07/decoupling-emissions-gdp-us>

Recently, the bipartisan, independent Maryland Commission on Climate Change (MCCC), which includes the Senate and House sponsors of this legislation in its membership, unanimously approved a recommendation for Maryland to adopt similar ambitious GHG reduction goals. The Commission, informed by the latest scientific findings on necessary action by developed nations to limit global temperature increases and by the research and analysis of reduction opportunities by the Commission's Greenhouse Gas Mitigation Working Group, recommended a different reduction goal for 2030 – a 50% reduction rather than a 60% reduction – and the same net-zero goal for 2045.² These paths are not mutually exclusive, as the goal in the GGRA sets a floor on reductions, not a ceiling. The Department has always aimed to develop plans to exceed the required reductions by as much as possible, given available technology, constraints on state authority, and the requirements in the law relating to economic benefit and other impacts.

On January 19, 2021 the Department provided a preview of the forthcoming *2030 GGRA Plan* wherein the Department and the other Maryland state agencies advanced a portfolio of measures that will reduce Maryland's 2030 GHG emissions to 48.7% below 2006 levels, very nearly achieving the Commission's recommended 2030 goal.³ The Department intends to supplement that plan shortly with updated estimates incorporating additional federal policies that will almost certainly bring Maryland's emissions below the 50% goal, once the incoming federal administration provides more detail on its immediate climate policy actions.

Timeline and Methodology

The bill would require the Department to issue a proposed plan to achieve the new 2030 GHG reduction goals by June 30th of next year, followed by a final plan by December 31st of next year. The Department would like to provide feedback on that timeline. The bill's requirement for a final plan following a draft by only six months does not allow for public comment and review of the numerous new mitigation programs that such a plan would need to propose, followed by material changes to program design and analysis. The Department and other state agencies would struggle to meet that deadline, as development of new mitigation programs requires significant time for research, careful analysis, and consultation among agencies and with outside experts, including other states and the MCCC. Also, the bill's requirement that MDE perform measure-by-measure emissions impact analysis would add significant time and expense to the analysis process.

The bill also places some narrower methodological requirements on the GHG plan that give MDE some concern.

First, the bill prohibits the plan from including “the use of carbon capture and storage technology” as a GHG reduction measure. The Department's practice is to exclude that technology from its analysis of 2030 emissions to avoid producing a plan that depends upon that new technology to achieve the 2030 GGRA goal.⁴ However, the Department notes that achieving deeper long-term goals like net zero by 2045 may require such technology to mitigate the GHG emissions from essential industrial processes that either have process heat demands that can only be met through combustion, or entail processes that emit CO₂ as a by-product.

Second, the bill requires the plan to use the 20-year global warming potential for methane to estimate GHG emissions. While the Department recognizes the need to focus on short-lived climate pollutants like methane, and uses the 20-year value in methane-specific policy analysis, it notes that using the 20-year value in the economywide plan would violate established standards for GHG accounting. Both national standards, including the Greenhouse Gas Protocol,⁵

² <https://mde.maryland.gov/programs/Air/ClimateChange/MCCC/Documents/MCCCAnnualReport2020.pdf>

³ <https://mde.maryland.gov/programs/Air/ClimateChange/MCCC/MWG/GGRA%20Planning%20Update.pdf>

⁴ See, for example, the 2019 Draft GGRA Plan: [https://mde.maryland.gov/programs/Air/ClimateChange/Pages/Greenhouse-Gas-Emissions-Reduction-Act-\(GGRA\)--Draft-Plan.aspx](https://mde.maryland.gov/programs/Air/ClimateChange/Pages/Greenhouse-Gas-Emissions-Reduction-Act-(GGRA)--Draft-Plan.aspx)

⁵ “...users are required to estimate GHG effects using 100-year GWP values in Chapters 8, 9, and 11. ['Estimating Baseline Emissions', 'Estimating GHG Effects Ex Ante', and 'Monitoring Performance Over Time', respectively]” <https://ghgprotocol.org/sites/default/files/standards/Policy%20and%20Action%20Standard.pdf>

and international standards, including the rules for implementing the Paris Climate Agreement,⁶ require the use of 100-year global warming potentials in GHG reduction plans.

Third, the bill requires the plan to include “specific estimates of the reductions expected from each greenhouse gas reduction measure included in the plan.” Older versions of the GGRA plan did include such “measure-by-measure” analysis, but methodologies and models have advanced since then, and best practice is now to analyze the effects of multiple measures simultaneously within an economy-wide modeling framework. That is because many programs interact with one another in fundamental ways, so they do not have independently attributable impacts (for example, the future reductions achieved by the EmPOWER program’s efficiency investments depend profoundly on how the electricity generation system changes due to the Renewable Portfolio Standard’s renewable energy deployments and the Regional Greenhouse Gas Initiative’s declining pollution cap). By analyzing such measures together, analysts can capture those interactive effects and correctly estimate what all measures achieve together, which is the most important question for economywide planning. After this request in the 2020 version of this bill, MDE increased its analysis budget for 2021 in order to roughly estimate measure-by-measure reductions by adding subsequent analyses wherein programs are removed from the modeling process one-by-one to see how the overall results change. That supplemental analysis of a subset of the most significant programs will be available in the Spring, but the Department notes that, while that analysis is of interest, such measure-by-measure analysis is conceptually flawed because of the interactions among measures, and a full analysis of every one of the dozens of measures in the GGRA Plan would be a substantial and expensive undertaking.

Fourth, the bill requires the Department to incorporate aircraft-borne estimates of methane emissions from landfills into the GGRA Plan and to require landfill operators to take various actions in response to those estimates. The Department recognizes the value of aircraft-borne estimates and continues to fund the University of Maryland’s work to gather those estimates. The Department and the University’s researchers continue to collaborate on how those estimates can improve Maryland’s GHG management. However, those estimates cannot replace the facility-level estimates the Department currently uses for regulatory purposes and for the GGRA Plan. The Department requires estimates that are (1) specific to a facility and (2) annual for those purposes. Aircraft-borne measurements do not provide estimates specific to a particular landfill or other source, since they measure methane emitted from numerous upwind sources and areas, and do not provide annual estimates since they only provide snapshots in time that are heavily dependent upon immediate conditions including weather. Therefore, these provisions in the bill cannot be implemented.

Fiscal and Operational Impact

In addition to the Department’s concerns noted above, SB 414 would have a fiscal and operational impact on the Department in several ways. The first impact is tied to the increase in the GHG emissions reductions to 60% from 2006 levels by 2030. Under the bill MDE would be required to adopt the first of two new plans by December 31, 2022, adopt regulations, and implement programs that reduce statewide GHG emissions to meet these more stringent emission reduction levels. The revised 2030 GHG reduction goal would require that MDE repeat the comprehensive emissions and economic impact analysis included in the current GGRA plan process using extended contracts with emissions and economic impact modelers. For the 2019 GGRA Plan and forthcoming, 2030 GGRA Plan, emissions modeling was done on an economy-wide scale, consistent with best methodological practices and best available models. SB 414 requires that emissions reductions be calculated for each individual measure included in the plan, despite the fact that relevant measures profoundly interact with one another, so do not have independently attributable impacts. MDE can, however, estimate theoretical independent impacts by supplementing its economy-wide analysis

⁶ "Pursuant the modalities, procedures and guidelines (MPGs) for the transparency framework for action and support adopted by decision 18/CMP.1, Parties agreed to use the 100-year time-horizon GWP values from the Fifth Assessment Report of the IPCC (see [table 8.A.1](#)), or 100-year time-horizon GWP values from a subsequent IPCC assessment report as agreed upon by the CMA, to report aggregate emissions and removals of GHGs, expressed in CO₂ eq ([decision 18/CMA.1, annex, paragraph 37](#))."
<https://unfccc.int/process-and-meetings/transparency-and-reporting/methods-for-climate-change-transparency/common-metrics>

approach with additional modeling scenarios that each evaluate the presence or absence of individual measures. MDE is performing supplemental analysis to explore that for a limited number of the most significant programs. Satisfying the requirements in this bill would have substantial additional impact because of the dozens of emissions reduction measures that Maryland has implemented and that the Department includes in the GGRA Plan.

SB 414 would establish a new Just Transition Employment and Retraining Working Group under the MCCC to perform a study and provide recommendations and a report to the Commission and General Assembly. The working group would be staffed by MDE. The bill also requires the Commission on Environmental Justice and Sustainable Communities (CEJSC) to perform numerous tasks including establishing a methodology to identify disproportionately affected communities, developing recommendations relating to state spending, holding public hearings and providing additional reports to the General Assembly. The Department appreciates the efforts of the legislature to promote justice, equity, diversity and inclusion. However, both commissions are volunteer bodies with other responsibilities, so the majority of the work required under this bill would be performed by MDE staff. MDE would need to hire additional positions to staff the new working group of the MCCC and perform the additional tasks required of the CEJSC.

The bill would also require MDE to perform an annual analysis of spending by all state agencies on GHG reduction programs, including an evaluation of the portion of spending that benefits disadvantaged communities, according to criteria established by the CEJSC. Implementing agencies could also face additional recordkeeping and reporting costs to provide the necessary information to MDE.

The bill also has a goal of “planting and helping to maintain in the State 5 million sustainable trees of species native to the State by the end of calendar year 2030.” The Department would be the lead agency required to help the State reach this goal. To this end, the bill would require the creation of a 5 million tree program coordinator within the Department who would be primarily responsible for leading DNR, MDA, and the Chesapeake Bay Trust to promote, facilitate, and align the State’s efforts to achieve the goals established under the amendments in this bill. In each fiscal year from 2022 through 2030, inclusive, \$1.25 million the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund shall be used to fund: the 5 million tree program coordinator position at MDE and 13 contractor positions in the forest service of the DNR to provide technical assistance, planning, and coordination related to tree plantings on public, private, and agricultural lands and in “underserved areas”.

This legislation transfers \$15 million per year in fiscal years 2022 through 2030 from the Bay Restoration Fund to other entities for tree planting activities. Specifically \$10 million will be transferred to the Chesapeake Bay Trust for a new Urban Trees Program established in this bill; \$2.5 million of the \$15 million annually will be transferred to the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund in DNR to be used for tree planting on public and private land; lastly, \$2.5 million of the \$15 million annually will be transferred to MDA to fund tree plantings under the Conservation Reserve Enhancement Program (CREP) and other tree-planting programs on agricultural land. Funds transferred from the Bay Restoration Fund under the bill would be after making payments on existing Bay Restoration Fund bonds, operation & maintenance funding for Enhanced Nutrient Removal wastewater treatment plants (WWTP), and major and minor WWTP upgrades. These funds are being diverted from the Bay Restoration Fund Wastewater account which would affect projects needed for bay clean up including stormwater control measures, sewer overflow abatement, and septic connections to BNR or ENR WWTPs. Bay Restoration Funding is allocated on a competitive basis and projects are ranked based on water quality, climate resiliency, flood control and public health benefits. The Department recently updated its project scoring system to incorporate nutrient reductions from riparian forest buffers that are planted with native species. The highest ranked funding applications are awarded BRF grant funding annually. Additionally, there are a large number of eligible applications that do not receive grant funding annually. If this legislation is enacted, there will be less funding available in the Bay Restoration Fund to go to local governments for stormwater control measures, septic connections, and sewer overflow abatement. This will likely make it more difficult for local governments to meet their MS4 permits and consent decrees for sewer overflows, as well as making it more difficult for the State to meet its obligations under the Chesapeake Bay TMDL, which has a court ordered 2025 deadline.

Capital projects have been included in the FY22 capital budget to utilize all FY22 BRF revenues, including \$15 million in revenues that would be transferred out of the BRF. These projects will have to be cancelled or possibly delayed for two years, when the local government would have to apply again. Since the solicitation for FY 2023 is open now until January 31, 2021, these cancelled projects will not be able to request funding until FY 2024. These projects, that were already selected for funding in FY 2022, will have to compete with new applications received and may not rank as high. The projects affected by the transfer in FY 2022 would be Fruitland Tuxents Branch Drainage in Wicomico County, Sanitary Sewer Reconstruction in Prince George's County, and a combined sewer overflow project in Allegany County.

Lastly, this bill would create a new commission entitled the Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings. This Commission would be in effect from June 1, 2021 to June 30, 2023. The Secretary of the Environment, or his designee would chair the Commission and the Department would provide staff for the Commission. Among other items, the Commission would be responsible for developing: a plan to achieve the tree planting goals mentioned above; a plan to ensure that trees planted are properly maintained; recommendations regarding the establishment of a Maryland-based carbon offset market to support the State's tree-planting goals; and recommendations on reviewing State policies to mitigate the clearing of trees during the construction of State transportation projects. The Department would require additional staff and contractual assistance to perform these tasks.

All of these provisions would create many new responsibilities for MDE and have a very large fiscal and operational impact. MDE would need to hire additional staff and procure contractor(s) to meet the requirements in this bill. Given the short timeline provided in this bill, MDE anticipates that hiring staff, even on a contractual basis, and procuring contracts would be difficult.

Furthermore, the bill would change how funding from the Regional Greenhouse Gas Initiative (RGGI) is allocated from the Strategic Energy Investment Fund (SEIF) by, among other items, identifying the Department's climate planning work as an eligible spending category for annual revenues in excess of \$50 million per year. The Department's Climate Change Program is currently funded by RGGI SEIF funds, under the 20% credited to the renewable and clean energy programs account. Funds taken from this account to support the newly created climate solutions account, where any additional support for MDE's climate change planning efforts is a low priority, could cause significant financial issues for MDE.

Thank you for your consideration. We will monitor SB 414 during the Committee's deliberations, and I am available to answer any questions you may have. Please feel free to contact me by e-mail at tyler.abbott@maryland.gov.

Sincerely,



Tyler Abbott

SB0414 (HB0583) - LOI (1).pdf

Uploaded by: Fahrig, Landon

Position: INFO



TO: Members, Senate Education, Health, & Environmental Affairs Committee
FROM: Mary Beth Tung – Director, MEA
SUBJECT: SB0414 – Climate Solutions Now Act of 2021
DATE: January 28, 2021

MEA POSITION: Letter of Concern

Senate Bill 414 poses significant fiscal challenges to MEA, as well as raises several issues generally.

Ratepayer Impact

The bill would extend EmPOWER energy efficiency and conservation programs from 2023 to 2026. The bill would also increase the incremental annual energy savings goal from 2% to 3%.

The proposal does nothing to alter the EmPOWER ratepayer funding mechanism, which would increase costs to ratepayers. Currently, EmPOWER has resulted in uncollected program costs of over \$800 million that will ultimately be collected from ratepayers. The increased annual requirement would likely exacerbate the debt issue unless there is an increase in the annual surcharge; which would negatively affect the current practice of limiting ratepayer impact. Also, considerations to lower the energy savings from Conservation Voltage Reduction (CVR) which accounts for over 25% of some utilities annual savings, and potential changes to lighting standards and lighting useful life could significantly increase the cost of achieving the required 3% annual savings.

RGGI Revenue - Generally

Historically, the Regional Greenhouse Gas Initiative (RGGI) auctions have provided the bulk of funding to the Strategic Energy Investment Fund (SEIF) which in turn funds MEA programs as well as a number of other initiatives throughout the State. Some advocates have mistakenly been citing a Maryland Department of the Environment (MDE) report, believing that RGGI will bring in an "additional" \$446 million this decade. This has been incorrectly interpreted to mean that RGGI annual proceeds will go up by ~\$45 million per year in the immediate future. The MDE report is in reference to a RGGI rulemaking more than two years ago, which included the comparison of two distinct scenarios for rules under which RGGI *could* be operated. It was a forecast of a proposed structure for RGGI. It was never an estimate of additional money that could be counted on compared to current or recent revenues.

To be clear, SEIF will not receive \$45M more from RGGI this year than it did last year, unless the RGGI auction revenue suddenly doubles, which is unlikely given market conditions and the RGGI cost containment reserve program currently in place. Even if MEA did see a substantial increase in RGGI revenue, it would only be restoring RGGI revenue to what it once was. RGGI revenue in FY20 was down ~37% from its peak.

RGGI Funding Cap, Diversion, and Formula Alterations

The bill proposes to limit the revenue for programs currently funded by RGGI proceeds by capping and diverting any revenues above \$50 million. The distribution of RGGI proceeds is formulaic. Therefore, the impacts of this new cap-and-divert initiative are easily approximated. Utilizing the FY22 budget analysis for comparison, we know that funding for energy assistance programs within the Department of Human Services would decrease by ~\$7 million and low-to-moderate (LMI) energy efficiency programs within MEA would see a decrease of \$1.7 million. Collectively, the bill reduces resources needed to lessen the burden of energy costs, especially during a period in which economic recovery should be paramount.

In addition to a new cap-and-divert approach to MEA funding, the bill also further constrains funds within the renewable and clean energy programs account by requiring the annual transfer of at least \$500,000, but up to \$2.5 million, outside of MEA for a “healthy soils” program. Recent RGGI revenue would place this transfer at or near the \$2.5 million mark on an annual basis. The renewable and clean energy account and SEIF more generally are already incredibly constrained. This puts at risk existing renewable energy, transportation sector, and grid resilience programs within MEA. With the impacts of this legislation, some of MEA’s most popular and effective programs, including those that help deploy Zero-Emission Vehicles (ZEVs) and solar, would likely be sacrificed entirely.

MEA FY20 programs will help garner over 43.9 million kWh of generated or avoided electricity, 159,000 therms of natural gas savings, 28,000 kW of new solar photovoltaic capacity, 1,100 tons of new ground source heat pump capacity, 14,000 gallons of gasoline saved and an additional 1,250 gallons of diesel saved. More specifically, in FY20 MEA utilized the renewable and clean energy programs account to reduce carbon emissions by an estimated 375,089 metric tonnes.

MEA believes strongly that the SEIF already funds targeted and proven programs producing greenhouse gas (GHG) emission reductions, reliable energy supply, energy efficiency, and the infrastructure needed for economic development and recovery; including programs targeted to assist traditionally marginalized communities. MEA further believes that there may be existing federal resources for programs like “healthy soils” that should be tapped prior to the permanent diversion of RGGI funds. This is especially true in this time of significant financial constraint. The bar to implement new initiatives that will effectively supplant existing MEA programs should include convincing evidence that the diversion of funds will result in a greater benefit as it relates to the allowable uses of SEIF. Stated another way, just because one *can* do a thing doesn’t necessitate that one *must* do that thing.

Commission Membership

The bill will expand the role of the Commission on Environmental Justice and Sustainable Communities (Commission) to include the development of “specific recommendations to address environmental justice concerns, reduce emissions of greenhouse gases and co-pollutants, and build climate equity and resilience within disproportionately affected communities; and... [s]et goals for the percentage of State

funding for greenhouse gas emission reduction measures that should be used for the benefit of disproportionately affected communities...”.

MEA, as previously highlighted in this text, operates a bevy of beneficial programs that are essential to the State’s GHG reduction goals. Specifically included in these programs are those targeted at increasing energy and financial resilience. For these reasons, it would be appropriate that MEA be represented on the proposed Commission.

Just Transition Employment and Retraining Working Group

The bill creates a Just Transition Employment and Retraining Working Group (Working Group) within the Commission. That Working Group is tasked with, among other things, identifying “[e]nergy-intensive industries...”. “[s]ites of electrical generating facilities that may be closed as a result of a transition to renewable energy...”, and “[s]ector-specific impact of the State’s greenhouse gas emissions reduction plan on the State’s current workforce”.

Similarly to the Commission, the tasks of the Working Group are heavily related to energy issues, yet the State’s authority on such issues, MEA, is excluded from involvement. In fact, two specific “environmental advocacy groups” are identified (though the focus of the Working Group is not environmental in nature) but neither MEA nor the Power Plant Research Program (PPRP) within the Department of Natural Resources are tapped for their subject matter expertise.

PPRP provides a framework for the comprehensive statewide review of all electric power issues with the goal of balancing need, cost and impact. MEA funds or administers a number of workforce training programs for the clean energy economy, and advises on policy that affects the transition to a clean energy workforce. The State does not yet have a strong data baseline of clean and traditional energy jobs in terms of quality, equity, and number to perform the Working Group’s mandate. However, MEA is currently funding research that will inform State policy regarding where training and recovery resources can be best applied.

It would be appropriate to include representatives from PPRP and MEA in the proposed Working Group.

Other Points of Interest

Carbon Capture, Utilization, and Storage

The bill prohibits MDE from including Carbon Capture Utilization and Storage (CCUS) as a measure to reduce GHG emissions. The requirement for MDE to create a plan to reach net zero emissions by 2045 will be difficult, if not impossible, without CCUS. This is a view gaining global recognition, where even at the Intergovernmental Panel on Climate Change (IPCC), three of their four projected pathways (2018) for carbon reduction rely on some form of carbon capture technologies. This is a key, developing technology in the fight against climate change. Furthermore, the State cannot even begin to decarbonize the industrial sector without this technology. If net zero carbon is the goal, it is inconceivable that CCUS

is omitted from state policy. This places into further doubt about whether the State is truly interested in reducing greenhouse gases.

Energy Codes

Maryland has already mandated the adoption of the International Energy Conservation Code (IECC) every three years. The next IECC cycle will be in 2021; which the State, followed by the counties, will be required to adopt within a certain timeframe. However, the bill would require energy reductions of a certain percentage based on the 2018 IECC beginning in January 2024 and running through January 2026. This means that projects will need to be designed with an eye on both the 2018 IECC as well as the then current IECC code (likely the 2021 IECC). The bill actually allows for more stringent standards, but this still means that multiple energy codes may need to be considered in the design and construction phases of development, likely resulting in increased design costs, market uncertainty, and an inefficient allocation of valuable resources.

Net Zero Schools

MEA helped fund the construction and design of Howard County's Wilde Lake Middle School, and now has experience with, and has helped to fund two additional schools in Baltimore City, which were dedicated this past summer, 2020. The benefit of one net zero school may be less than the benefits that could be had for the same overall cost by utilizing more cost-effective upgrades to multiple schools. This would also increase the geographic diversity of the overall benefits.

MEA is working closely with the Interagency Commission on School Construction to understand the energy management practices of schools and where investment can yield the greatest financial, safety, performance, and environmental benefits. As schools adapt to re-opening, significant investments will be needed in heating, cooling, and ventilation, including the conversion of major systems to lower-carbon sources of energy. While supporting net zero schools is desirable in the long term, addressing more immediate needs may provide greater GHG emissions reductions at lower costs. This should be a policy focus.

Major Renovation Definition

Part of the definition of "major renovation" is tied to "project costs exceeding 50% of the assessed value of the building". Tying this definition to costs could create a regulatory environment rife with system-gaming. Costs can vary heavily based on contractor assumptions, required levels of environmental mediation, and local wage rates. This may result in, or even encourage, system-gaming; the purposeful avoidance of triggering the "major renovation" definition.

SB414_MDP_Info_Gruzs.pdf

Uploaded by: Gruzs, Adam

Position: INFO

HEARING DATE: January 28, 2021

BILL NO: SB0414

COMMITTEE: Education, Health, and Environmental Affairs

POSITION: Letter of Information

FOR INFORMATION CONTACT: Adam Gruz (410) 767-4613

TITLE:

Climate Solutions Now Act of 2021

BILL ANALYSIS:

SB0414 proposes changes to the responsibilities of the Commission on Environmental Justice and Sustainable Communities (Commission) by adding a task to be completed by the end of 2022 that mandates consultation with our agency (along with several other state agencies). The bill indicates that to complete this task, the Commission shall consider “geographic, public health, environmental hazard, and socioeconomic criteria.” Our agency likely will be called upon to provide socioeconomic, population, and land use data to support completion of the Commission’s task.

POSITION AND RATIONALE:

This is a large and multi-faceted bill that has broad implications for multiple state agencies. This bill would have an impact on expenditures to the extent that Planning anticipates significant staff time will be needed in order to support the work of the Commission and to work in collaboration with other state agencies.

This bill will likely have significant direct and indirect cost implications on private development. The bill mandates several additional requirements for buildings that could add upfront costs for design and construction. Although there are some exceptions in the bill, the additional upfront costs could discourage smart development and growth goals by raising costs to a point where a profit cannot be made. Over time, building owners and occupants may obtain the benefit of energy savings and credits from renewable energy use; however, the building constructors do not obtain those benefits.

To a certain extent, this bill also provides for significant redundancies in state government, including the fact that the state already has tree planting goals as well as aggressive and enforceable Chesapeake Bay cleanup efforts. This bill also requires expenditures from the Transportation Trust Fund. In large measure, this bill is a large unfunded mandate.

The bill has several provisions that would raise costs for local government operations or finances: (a) the bill mandates that certain municipal solid waste landfills must complete certain research and analyses when discrepancies in methane emission data exist; (b) although there are still schools that exist in the state without functional climate control where students do not have air conditioning or functional heating systems, the bill mandates that at least one new school (over an 8-year time period) must be built to either meet net-zero energy requirements or shall be solar ready (although the bill proposes a net-zero school loan fund to cover the local construction costs to meet net-zero energy requirements, the loan fund does not appear to be available to make schools solar ready, and it appears that the repayments are to be made by an amount equal to the energy savings, so there does not appear to be any actual cost reduction to the school until after the loan is repaid in full.); also, the bill does not clarify whether local design and construction management costs to meet net-zero energy requirements would be covered by the proposed net-zero school loan fund); (c) the bill mandates that local governments complete certain life-cycle analyses for new buildings (this includes new local government buildings); and (d) the bill mandates an exemption from county or municipal property tax the machinery or equipment added to certain community solar energy generating systems serving low- or moderate-income customers.

The new tree planting provisions in the bill could support small businesses that provide supplies for tree planting, including planting equipment and nurseries. Small businesses involved with obtaining, distributing, or manufacturing supplies or parts for low- or zero-energy vehicles or buildings could be benefitted. Depending on the specific plans that MDE establishes to meet the more aggressive greenhouse gas reduction goals for 2030 and 2045 mandated by the bill, some small businesses that specialize in energy reduction or alternative energy measures could benefit, while small businesses that specialize in energy (e.g., distribution) could be negatively affected.

sb414test.pdf

Uploaded by: Jackson, Marcus

Position: INFO



**Maryland Joint
Legislative Committee**

The Voice of Merit Construction

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January 28, 2021

The Honorable Paul G. Pinsky
Chair
Education, Health, and Environmental Affairs Committee
2 West
Miller Senate Office Building
Annapolis, Maryland 21401

Dear Senator Pinsky,

My name is Marcus Jackson, and I am here to represent the four Maryland Chapters of the Associated Builders and Contractors and our 1500 member firms. We are speaking to you today to address SB 414 – The Climate Solutions Now Act of 2021. This is wide sweeping legislation that will have a far-reaching impact on our communities and the lives and the welfare of Maryland families.

We're not here to address the science behind this bill. We are not scientists. Our goal is to speak to the tremendous opportunities and challenges a bill like this will have on Maryland's workforce. We are grateful to the committee that they had the foresight to make sure the various work groups established by this legislation will be represented by a broad mix of backgrounds, experiences and perspectives. You have educators, representatives from labor, environmental groups and employers.

As the largest organization in Maryland to represent commercial builders, and the largest provider in the State of multi-craft training programs, we request that we be given a seat as registered apprenticeship sponsors on the Just Transition Employment and Retraining Working Group. ABC's primary mission is to develop the next generation of skilled craft professionals.

Each year we train several thousand individuals in everything from apprenticeship and craft training to safety certification training and management and supervisory education. We work in the schools and have school-to-career programs with Career Technology Education programs across the state.

Our members are leaders in the industry. They are the general contractors who manage the projects. They are the specialty contractors who perform the work and employ the skilled craft professionals who are building Maryland's hospitals, high-tech data centers; schools; multi-family housing projects; office buildings and more.

When asked the most pressing need facing our industry, to a contractor they will answer the demand for skilled labor. And they are saying this now, even in the midst of this pandemic and its accompanying impact on the economy.

The construction industry is on the cusp of its most severe skilled-worker shortage in more than a generation. And when we emerge from the pandemic, you will see a dramatic surge in construction activity. And the certainty of that surge is true even if technology and the industry remain static. But as we all know, there is nothing static about technology. And all of us, regardless of our industry, must evolve and adapt to these changes or risk irrelevance or extinction.

And judging by the Climate Solutions Now Act of 2021, Maryland has no intention of remaining static. Our industry must anticipate this change. But thankfully, the skills we teach – whether its electrical, mechanical; instrumentation; steel erection or any other craft -- are transferable, whether you are building a new school, a hotel or a modern wind turbine.

Again, as the largest construction employer and training organization in Maryland, we ask we be given favorable consideration to our request for a seat on the Employment and Retraining Work Group.

We look forward to the opportunity to work together to build a well-trained and sustainable workforce for an evolving and sustainable economy.

Thank you.



Marcus Jackson, Director,
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Uploaded by: McKitrick, James

Position: INFO



Larry Hogan, Governor
Boyd Rutherford, Lt. Governor
Jeannie Haddaway-Riccio, Secretary

January 28, 2021

The Honorable Paul Pinsky
Chair, Education, Health and Environmental Affairs Committee
2 West Miller Senate Office Building
Annapolis, MD 21401

The Honorable Cheryl C. Kagan
Vice Chair, Education, Health and Environmental Affairs Committee
2 West Miller Senate Office Building
Annapolis, MD 21401

Re: Letter of Information – Senate Bill 414 – Climate Solutions Now Act of 2021

Dear Chair, Vice Chair, and Committee Members,

The Maryland Department of Natural Resources is providing the following information on Senate Bill 414. Among a slew of other provisions, this bill creates a new State goal of planting and maintaining five million trees by 2030. The department's Chesapeake and Atlantic Coastal Bays Trust Fund will provide \$1.25 million annually for forestry staff and a program coordinator housed in the Maryland Department of the Environment (MDE). MDE's Bay Restoration Fund will also provide a total of just over \$5 million annually towards the new State goal, with \$2.5 million to the Maryland Department of Agriculture for enhanced signing bonuses under the Conservation Reserve Enhancement Program. A State plan for meeting the five million tree goal will be created by the new Commission for the Innovation and Advancement of Carbon Markets, with their plan due by October 2022.

Currently, Maryland is committed to participating in two different watershed-wide tree planting goals of 900 miles per year of riparian forest buffers and 2,400 acres of urban tree canopy through the 2014 Chesapeake Bay Watershed Agreement. Additionally, meeting our larger Chesapeake Bay restoration and greenhouse gas reduction goals involve a wide array of tree planting practices. The Chesapeake Bay Program currently recognizes and tracks ten different tree planting best management practices all with different units of measure. It is challenging enough to meet and track the crowded field of existing goals. **Adding another large-scale goal will have the result of confusing and hindering Maryland's continuing tree planting and maintenance progress.**

The scientific basis for selecting a goal of an additional five million trees is unclear. Given this number is surely arbitrary, **SB 414 risks misallocating funds that could otherwise be better spent cleaning up the Chesapeake Bay.** Planting any tree is helpful, but not all trees planted in all locations are of equal value. The Chesapeake Bay Program's tree planting Best Management Practices have undergone extensive technical review to identify their nutrient and sediment reduction benefits. While the state could conceivably plant five million trees, doing so randomly just to achieve a number goal would undoubtedly have less restoration benefits than strategically planting fewer trees in key areas and following approved Best Management Practices.

Other concerns around ***SB 414's misallocation of limited Chesapeake Bay restoration resources include the raiding MDE's Bay Restoration Fund and DNR's Chesapeake and Atlantic Coastal Bays Trust Fund.*** While MDE's Bay Restoration Fund has met its primary intended purpose of upgrading the major wastewater treatment plants the redistribution of its monies needs to be carefully considered and should allow for the "most bang for the buck" in Bay clean-up. This is especially true given the number of large legislative initiatives in the 2021 Legislative Session that -- whether right or wrong -- see these dollars as free money for pet causes. SB 414 should ensure that enough funding remains in the Bay Restoration Fund to meet our remaining Phase III Watershed Implementation Plan commitments on wastewater treatment plant performance. In the same vein, SB 414 appears to divert \$1.25 million annually from the Chesapeake and Atlantic Coastal Bays Trust Fund. In prior years, the General Assembly has backed the department to prevent raids on the fund because, by law, each dollar spent by the Chesapeake and Atlantic Coastal Bays Trust Fund must meet the greatest nutrient reduction possible.

It is entirely possible that ***the goal of planting 5 million trees on top of the department's efforts under the Greenhouse Gas Emissions Reduction Plan for approximately 9 million trees is not physically achievable*** given SB 414 parameters and the realities of tree planting in Maryland. The land area required to plant this many trees -- approximately 10,000 acres at typical tree planting densities -- is simply huge and must be done on private land where opportunities exist. SB 414 specifically states trees planted under this initiative are not to be harvested, and private landowners have to sign a legal agreement they will maintain the area in trees for 15 years. These restrictions and the lack of incentives (*see the Maryland Department of Agriculture's Letter of Information*) provided in the bill will result in very few landowners willing to participate. As a result, the State would need to purchase land just to plant trees at costs not even close to being covered in the legislation.

Thank you for allowing the department to submit this information on SB 414 for the committee's careful consideration.

Respectfully submitted,

James W. McKitrick
Director, Legislative and Constituent Services

2021 SB 414 Climate Change Now Act DGS LOI EHEA 1-

Uploaded by: Robertson, Ellen

Position: INFO

Larry Hogan
Governor

Boyd K. Rutherford
Lt Governor



Ellington E. Churchill, Jr.
Secretary

Nelson E. Reichart
Deputy Secretary

OFFICE OF THE SECRETARY

BILL: Senate Bill 414 - Climate Solutions Now Act of 2021

COMMITTEE: Senate Education, Health and Environmental Affairs

DATE: January 28, 2021

POSITION: Letter of Information

Upon review of Senate Bill 414 – Climate Solutions Now Act of 2021, the Department of General Services (DGS) provides these comments for your consideration.

The bill's impacts on DGS Capital Construction and Energy Projects:

- Public Safety Article §12-511 is changed to require any new buildings over 20,000 square feet of roof to be “solar ready”. DGS anticipates the costs of new **capital design and construction projects to increase by .7%** to accommodate this requirement. **Installing the solar panels themselves would require an additional \$5.25 per square foot.**
- Changes under Public Safety Article §12-511 also increase energy efficiency requirements in state building codes that exceed the 2018 International Conservation Code by increasing amounts starting with 30% in 2024 and increasing to net zero after 2033. Increasing the requirements in the energy code will increase construction costs of new and renovated buildings. Current energy codes are reviewed by the US Department of Energy to ensure that additional code requirements are cost-effective, in that the energy savings attributable to the new standard pays for itself, **but the requirement in this bill calls for no such review process.**
- State Finance & Procurement Article §3-602.1 is changed to require zero energy or net zero energy be applied to facilities with over 25% of the cost coming from State capital funds and if the building is 7,500 square feet or larger. Total **capital costs are anticipated to increase by 22%** for design and construction of new and major renovation projects.
- The above would positively impact the energy consumption of State Facilities and assist the State in meeting the Executive Order for State energy reduction. Operationally, if solar systems are added to a facility that generates energy greater than the need of the facility the solar is attached to, the DGS Energy Office may need additional resources to tie the increased generation into the State's renewable energy portfolio and use the excess on other State accounts.



- In addition to the first costs associated with achieving net-zero schools and facilities, State Finance & Procurement Article § 3-602.1, 4-809(7) would require the Maryland Green Building Council to "develop guidelines for evaluating the energy balance and achieving a net zero energy balance". Development of guidelines, and compliance with them, would require a continuous and ongoing effort by DGS support staff and the Maryland Green Building Council.
- Training will be needed for State project managers and design review staff to understand Net Zero requirements. This will increase their ability to ensure these projects are programmed, designed and constructed to meet these requirements. Training is estimated at \$40,000 per year and on-going to ensure staff can remain updated in codes and technologies.
- For DGS to perform evaluations to ensure compliance with the Public Safety Article §12-513(B)(1) "...regulations shall require energy models for new construction to evaluate life cycle costs for (1) "a mixed-fuel option, including a combination of combustion-and electric-powered equipment." and (2) "require all reasonably foreseeable future costs....." the design efforts of architect and engineering consultants providing services will be increased and the efforts of design reviewers will be increased. Additionally, costs for training of DGS staff to enable capable performance of such life cycle cost analysis reviews will be required.

The bill's impacts on DGS Fleet and Fuel Management:

- The Bill requires 100% of the State Fleet of light duty vehicles be zero-emission by 2030. DGS currently has 74 light duty fleet vehicles, none of which are zero emission. This would require replacement of all vehicles. DGS understands the **cost difference to be \$10,604 between a traditional internal combustion vehicle and a fully electric vehicle** on a State contract. DGS's fleet is not scheduled nor budgeted for replacement. DGS will also need charging infrastructure in place to support an electric fleet, so there will be costs to procure and install charging stations.
- DGS has a fleet that includes sedans, SUVs, and police vehicles. Currently, the impact to expenditures can only be calculated for the replacement of sedans, since there are no existing replacement options for SUVs or police vehicles, and, therefore, costs cannot be estimated. DGS has 34 sedans in its fleet. The total cost impact of replacing those sedans with ZEVs **will be \$226,219 more than if they were replaced with conventional non-ZEV sedans. The cost of infrastructure to support the incoming ZEV is estimated to be \$72,500. Balanced with savings from fuel use reduction and decreased maintenance costs (for a savings of \$69,391) the net impact on fleet related expenditures will be \$229,327 through FY2026.**

- Offsetting some of the costs of transitioning to EVs is an expected reduction in per vehicle annual fuel and maintenance costs of \$2,805. The annual expected increase in vehicle costs would be \$54,973.
- DGS is leading a State-wide coordinated effort to identify Electric Infrastructure needs and ensure adequate infrastructure is in place to meet existing climate and transportation goals. DGS currently works cooperatively with stakeholders at MDOT, DBM, MEA, MDE, and others to ensure a coordinated approach to installing infrastructure at State facilities. Replacing all light-duty vehicles with ZEV would be an ambitious first step and would be in line with our current goals. **It is difficult to require all vehicles be ZEV, with no language for waivers, when there are usage cases that will not align with having ZEV or for which no option exists on the market.**
- Transitioning all State light-duty fleet vehicles to ZEV will have an impact on the Statewide Fuel Program and its revenues which are collected on the sales of fuel at State fueling stations. The program generates approximately \$800,000 in revenue per year, from the sales of fuels. Revenues will be impacted by fewer vehicles requiring fuel. Depending on the roll out of replacement vehicles across the State, **DGS could lose approximately \$735,000 in revenue or more by FY26.**
- The above referenced revenue is used for the agency division's operating expenses and will need to be absorbed elsewhere in the budget so that the fuel stations may remain fully functional until the entire fleet is electrified—something that may take many years. It is possible that there may be an opportunity to collect revenue through DGS owned Electric Vehicle charging stations in the future to offset some of the lost revenue.
- DGS notes that further than the 6-year scope of this fiscal note, there will be significant costs incurred for the decommissioning of the State's 120+ fueling sites. DGS will decommission all non-MDOT owned sites, which are expected to cost **\$250,000 per site**. MDOT should be queried on the decommissioning and funding of MDOT-owned refueling sites as they relate to this bill.

The bill's impacts on DGS's Capital Grants and Loans Program:

- State Finance & Procurement Article §3-602.1 changed from facilities with 100% state funding to facilities with 25% or more in State capital funds. Currently, the State's Capital Grants program is excluded. **This change would include capital grants and increase the cost of grantee's projects.** Many grantees are small entities; this requirement may be difficult for grantees to meet.
- In order to ensure that Capital Projects funded through the Capital Grants Program meet the criteria and standards established under the High-Performance Green Building Program the Capital Grants & Loans Office would need to add a minimum of **three Compliance Officers at \$60,000 each for a total fiscal impact of \$120,000.**

The bill's impacts on DGS's Office of State Procurement:

- Senate Bill 414 requires reporting from the Chief Procurement Officer (CPO) at DGS. In order to complete the reporting requirements, the State's eProcurement system (eMaryland Marketplace Advantage – eMMA) would need to have a query developed to fulfill this requirement. Senate Bill 414 would require collaboration between DGS and the DBM Fleet Management division on the total number of vehicles within the State's Fleet. The State would also need a **fleet asset management system and personnel** to track and report on this data as neither DGS or DBM has this technology and currently tracks its fleet manually.
- State Finance and Procurement Article § 14-417 of Senate Bill 414 requires reporting from the Chief Procurement Officer (CPO) at DGS on all agency purchases of vehicles. Currently, **DGS does not track the State's fleet, as these duties fall to the Department of Budget and Management (DBM).** DBM is responsible for managing the State's fleet and establishing the annual fleet specifications and requirements that are approved by the BPW. **It would be appropriate for this reporting requirement to be the responsibility of DBM with support from the CPO** to provide purchase data from procurements for light-duty vehicles conducted during the previous fiscal year. The CPO in coordination with DBM Fleet Management would establish the "light duty vehicle" specifications for procurements and ensure all purchases were in accordance with the specifications and tracked within the State's eProcurement system, eMaryland Marketplace Advantage (eMMA), to obtain the annual purchase data. DGS would require personnel to gather and compile the purchasing data from eMMA for the annual report.

For additional information, contact Ellen Robertson at 410-260-2908.

MDA - SB 414 - Letter of Info.docx.pdf

Uploaded by: Shirk, Cassie

Position: INFO



Maryland Department of Agriculture

Office of the Secretary

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor
Joseph Bartenfelder, Secretary
Julianne A. Oberg, Deputy Secretary

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Maryland Department of Agriculture

Legislative Comment

Date: January 28, 2021

BILL NUMBER: Senate Bill 414
SHORT TITLE: Climate Solutions Now Act of 2021
MDA POSITION: Information

The Maryland Department of Agriculture (MDA) has reviewed Senate Bill 414 – *Climate Solutions Now Act of 2021* – and offers the comments below on the operational and fiscal impacts to MDA and the agricultural community.

Foremost, MDA recognizes the significant actions that will need to be taken to address climate change, and has been an active participant with the Maryland Commission on Climate Change (MCCC) as it updates the state's Greenhouse Gas Reduction Act (GGRA) Plan. Accordingly, the forthcoming GGRA Plan recognizes the increasingly important role our state's agricultural lands can play in mitigating climate change. The work of the MCCC has been robust and inclusive of many stakeholders to ensure an aggressive, but achievable, reduction in greenhouse gas emissions while the language of SB 414 would create new program requirements that demand personnel and resources not currently allocated to MDA.

New Commissions and Work Groups

Senate Bill 414 expands the Commission on Environmental Justice and Sustainable Communities (EJSC Commission) and creates the Just Transition Employment and Retraining Work Group (Work Group). The charge to the EJSC Commission is relevant to our rural communities and farms being impacted by poverty and climate change, as well as urban communities impacted by poverty and access to local, nutritious food. Likewise, the Work Group is charged with conducting a study to assess opportunities and impacts to our "working lands as Maryland transitions to a low-carbon economy. However, neither MDA and/or agricultural representation are mentioned among the named membership. Given the expansive charge to both the EJSC Commission and the Work Group, MDA would recommend including its agricultural expertise and the agricultural industry among its members. Additionally, the time commitment to

adequately serve and achieve the goals of the EJSC Commission and the Work Group will warrant new Departmental staff to consider the breadth of MDA programs subject to the goals.

The legislation would also enact a Commission on Innovation and Advancement of Sustainable Tree Plantings and Carbon Markets (Commission), and does name the MDA Secretary as a member. Among the charges to the Commission are developing a state plan to achieve a 5 million trees goal, and developing recommendations for a state carbon offset market. Again, the time commitment to adequately serve and achieve the goals of the Commission will warrant new Departmental staff to align the charge with existing program efforts.

Healthy Soils Program

MDA's Healthy Soils Program, created by 2017 legislation, recognizes the need to provide incentives to Maryland farmers to realize the full potential of soil health practices to improve soil function and to address climate change. The Department has been actively discussing soil health prior to the 2017 legislation, and is currently updating its online farm assessment tool to add carbon sequestration estimates to its nutrient and sediment capabilities. Additionally, MDA is formally evaluating conservation practices and incentive options within its Soil Health Advisory Committee that will create the framework of the Healthy Soils Program. Concurrent with the forthcoming recommendations of the Soil Health Advisory Committee, MDA and partners, have recommended a permanent, dedicated funding source for the Healthy Soils Program. As such, MDA appreciates SB 414 language to qualify the Healthy Soils Program as a "climate change and resiliency program" eligible for the state's Strategic Energy Investment Fund (SEIF). Funding is proposed to start in 2022, and would provide funding at \$500,000 annually or 5% of SEIF funds, whichever is greater. However, MDA also recognizes current SEIF program allocations may be over prescribed, and a redistribution of SEIF funds to new programs may create constraints on the fund pool. The Department would welcome discussions with other state agencies managing SEIF funds to ensure its most effective use.

Advancing Tree Plantings

The state and MDA have longstanding programs to promote the adoption of natural filters, such as tree plantings, to address water quality concerns. Senate Bill 414 would advance tree plantings to address climate change through two primary initiatives impacting agriculture: 1) Increasing the signing bonus payment for forested riparian buffers to \$1000/acre for agricultural producers enrolled in USDA's Conservation Reserve Enhancement Program (CREP). Currently, MDA pays a signing bonus for all enrolled CREP practices at \$100/acre per contract terms in the Memorandum of Understanding (MOU) between MDA and the USDA. Under President Trump's administration, revisions to the MOU would have required renegotiation of all MOU terms and likely, ultimately, disadvantaged Maryland's CREP offerings. While MDA fully expects the incoming USDA leadership under President Biden will also require changes, such as SB 414's increased signing bonus, to be documented in an MOU, it remains to be seen if President Biden's administration will require a full renegotiation of the MOU; and 2) Planting 5 million trees by 2030 in addition to programs already committed in 2019 GGRA. Opportunities for tree plantings on agricultural lands were assessed during the development of Maryland's Phase 3 Watershed Implementation Plan and recently included in MDA's Healthy Soils Program goals for the 2019 GGRA Plan. Stipulating additional acres for agricultural tree planting beyond those in the GGRA

Plan will be difficult to achieve and should be balanced with a commitment to preserve Maryland's working farmlands to protect open space, habitat, and the state's food supply.

Funding for the two initiatives described above largely come from the redistribution of Bay Restoration Funds, of which MDA is a current recipient of approximately \$12 million annually for its Cover Crop program. Cover crops are acknowledged as one of the most cost effective conservation practices for addressing water quality and soil health on the agricultural landscape. Should the Maryland Department of Environment be adversely impacted by a decreased allocation from the Bay Restoration Fund, it would still remain critical to retain MDA's Cover Crop program funding level.

If you have additional questions, please contact Cassie Shirk, Director of Legislation and Governmental Affairs, at cassie.shirk@maryland.gov or 410-841-5886.

SB0414 - OPCP - OEP - Climate Solutions Now Act of

Uploaded by: Westervelt, Patricia

Position: INFO

January 28, 2021

The Honorable Paul G. Pinsky
Chair, Senate Education, Health, and Environmental Affairs Committee
2 West Miller Senate Office Building
Annapolis MD 21401

Re: Letter of Information – Senate Bill 414 – Climate Solutions Now Act of 2021

Dear Chairman Pinsky and Committee Members:

The Maryland Department of Transportation (MDOT) offers the following letter of information for the Committee's consideration on Senate Bill 414 due to its far-reaching impacts on numerous aspects of Maryland's transportation network.

Senate Bill 414 requires the State to reduce statewide greenhouse gas emissions (GHG) by 60% from 2006 levels by 2030 and requires the State to achieve net-zero statewide GHG emissions by 2045. Among numerous other provisions, the bill requires the State to begin transitioning its light duty vehicle (LDV) fleet to zero emission vehicles (ZEV). The State would also be required to develop a schedule and process for converting the State's transit bus fleet to ZEV and could not purchase non-ZEV Transit Buses beginning in FY 2023.

It is important to note that the Maryland Commission on Climate Change (MCCC) has spent significant time and resources over the past two years (2019-2020) working closely with the Maryland Department of the Environment (MDE), other State agencies, and numerous stakeholders, on analyzing and understanding climate change mitigation in Maryland. The MCCC has determined that an appropriate and aggressive target for 2030 emission reductions would be a 50% reduction from 2006 levels. This exceeds the current goal of 40% reduction required under the existing Greenhouse Gas Reduction Act (GGRA) and is based on the most recent data and analyses, including economic impacts, available in Maryland and region wide.

Planning is underway within MDOT to address electrification of MDOT's fleet, including its LDVs and its medium and heavy-duty vehicles supporting operations in all MDOT Transportation Business Units (TBUs). MDOT is also in close coordination with the Department of General Services (DGS) on DGS's Electrification Infrastructure Strategy. A comprehensive strategy for installing charging infrastructure is required to support electrification of the State's fleet of vehicles. Today, most deployments of ZEV transit buses across the United States are via pilot projects, and the transition to a fully zero-emission fleet is highly dependent on

continued advancement of technology. Transitioning the MDOT Maryland Transit Administration bus fleet would require significant service changes to match the capabilities of current ZEV transit buses in production. In addition, zero-emission bus conversion will require a heavy investment in charging and maintenance infrastructure and in workforce training. Furthermore, the legislation does not exclude Mobility vehicles from the zero-emission requirements; zero-emission buses are not yet readily available from manufacturers for these vehicle types.

It is also critical to remain flexible when considering future transportation funding options. While we appreciate the focus on the Maryland Transportation Trust Fund (TTF), we would not suggest limiting the funding to only the TTF as that may limit opportunities for Maryland to take advantage of potential future funding sources. These sources could include private grants, federal incentives, and other opportunities which could be instrumental in helping Maryland succeed in our ambitious GHG reduction and clean transportation goals. Along the same lines, prohibitions on particular GHG emission reduction measures, such as widening, can have unintended consequences throughout the transportation system. These kinds of limitations may result in the development of significant barriers and impacts to our most vulnerable populations and communities and impede Maryland's ability to reach our targets.

The Maryland Department of Transportation respectfully requests the Committee carefully consider this information when deliberating Senate Bill 414.

Respectfully submitted,

Heather Murphy
Director of Planning and Capital Programming
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