#### Amendment 103 to Council Bill No. 28 -2023

BY: Liz Walsh Legislative Day 11
Date: 10/02/2023

#### Amendment No. 103

(This Amendment makes the following changes to HoCo by Design Chapter 3 and Chapter 11:

## Chapter 3: Ecological Health

- Amends the EH-2 Policy Statement to integrate climate change mitigation goals into programs receiving County funds and amends the Implementing Actions to accelerate implementation of the Howard County Climate Action Plan and ensure County agency policies align with the plan, accelerate inclusion of onsite renewable power generation at appropriate locations, and refuse permitting to expand or extend fossil fuel infrastructure;
- Amends the EH-5 Policy Statement Implementing Actions to accelerate completion of the flooding vulnerability assessment and revise capital project priorities accordingly and accelerate the use of green stormwater infrastructure;
- Amends the EH-11 Policy Statement Implementing Actions to require the County to incorporate environmentally sensitive site development and property management practices on County properties;

#### Chapter 11: Implementation

- Amends the EH-2 Policy Statement to integrate climate change mitigation goals into programs receiving County funds and amends the Implementing Actions to accelerate implementation of the Howard County Climate Action Plan and ensure County agency policies align with the plan, accelerate inclusion of onsite renewable power generation at appropriate locations, and refuse permitting to expand or extend fossil fuel infrastructure;
- Amends the EH-5 Policy Statement Implementing Actions to accelerate completion of the flooding vulnerability assessment and revise capital project priorities accordingly and accelerate the use of green stormwater infrastructure; and
- Amends the EH-11 Policy Statement Implementing Actions to require the County to incorporate environmentally sensitive site development and property management practices on County properties.)

- 1 In the *HoCo By Design* General Plan, attached to this Act as Exhibit A, amend the following
- 2 pages as indicated in this Amendment:
- Chapter 3: Ecological Health: 15, 24, and 57;
- Chapter 11: Implementation: 16, 18, and 22.
- 5 Correct all page numbers, numbering, and formatting within this Act to accommodate this
- 6 amendment.

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#### **EH-2 Policy Statement**

Seek to integrate Integrate climate change mitigation and adaptation goals into all county programs and policies receiving county funds, including the Howard County Public School System.

#### **Implementing Actions**

- 1. Ensure Accelerate implementation of the Howard County Climate Action Plan update continues to maximize opportunities to mitigate and adapt to climate change with clear goals and strategies and ensure that the programs and policies of each department and agency are aligned with the plan's goals and strategies.
- 2. Evaluate and enhance opportunities where needed for climate change mitigation and adaptation measures in the Subdivision and Land Development Regulations and Zoning Regulations, such as natural resource protection and the provision of renewable energy.
- 3. Enhance county design requirements for county infrastructure and public and private buildings, to ensure these structures will be resilient under projected future weather patterns and minimize resource consumption.
- 4. Review and update county Green Building requirements for opportunities to enhance the sustainability of public and private buildings.
- 5. Identify and ensure economically-vulnerable communities, businesses, and households have the resources necessary for mitigation and adaptation measures.
- 6. Accelerate inclusion of on-site renewable power generation on appropriate existing and new rooftops, canopies and covers.
- 7. Refuse permitting to expand or extend fossil fuel infrastructure on county land.

# Protecting Sensitive Environmental Resources

The County Subdivision and Land Development Regulations and Zoning Regulations contain significant provisions for the protection of sensitive environmental resources when properties are developed. This section discusses regulatory protections for water resources, steep slopes, and rare, threatened and endangered species, as well as three zoning districts specifically designed to protect sensitive resources. Additional protective measures for forests and stormwater management requirements are addressed in later, separate sections.

## Water Resources and Steep Slopes

Water resources include rivers, wetlands, floodplains, ponds, lakes, and groundwater. These are vital natural resources that provide drinking water, stormwater management, pollution abatement, floodwater storage, and recreation, as well as important habitat for a wide variety of plant and animal species.

To protect water quality and habitat within streams, the County Subdivision and Land Development Regulations require the following undisturbed streamside buffer areas:

- 75 to 100 feet along perennial streams in residential zoning districts;
- 50 feet along perennial streams in non-residential zoning districts; and
- 50 feet along intermittent streams in all zoning districts.

The regulations also require a 25-foot undisturbed buffer around nontidal wetlands. Additionally, most wetlands in the County are found within the 100-year floodplain, which is protected from disturbance.

County regulations also protect steep slopes of 25% or greater when there is a contiguous area of 20,000 square feet or larger. Disturbing steep slopes can generate excessive erosion and sedimentation that can be difficult to contain even with enhanced sediment and erosion control practices, and once disturbed steep slopes can be difficult to stabilize. This can be especially problematic when these slopes are adjacent to water bodies. When slopes of 15% or greater occur in conjunction with highly erodible soils, these erosion problems are intensified.

To provide the greatest benefit, stream and wetland buffers should be wide enough to allow adequate filtering of overland stormwater runoff, include adjacent steep slopes and highly erodible soils, and be forested. The use of a floodplain buffer can improve resilience to flooding by accounting for future changes in the floodplain due to changing weather patterns (increased rainfall), increased development, or outdated mapping.

County regulations require sediment and erosion control practices comply with the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control when development or forestry activities will result in clearing and grading. These practices prevent sediment and other pollutants from leaving a disturbed site and entering nearby water bodies during storm events. The requirements for sediment and erosion control should be reviewed to ensure they are adequate for changing precipitation patterns, especially short-duration, high-intensity storms.

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In 2022 the County initiated a Vulnerable Watershed Restoration and Resiliency Program to evaluate whether other watersheds are or will become susceptible to flooding and develop potential capital projects to address the problem areas. For more information about state and county efforts to address flooding, please see Technical Appendix A: Environment.

#### Redevelopment

The County's stormwater management regulations also have requirements for redeveloping sites. Redevelopment sites must reduce impervious cover by 50% or provide an equivalent water quality treatment for the first one inch of rainfall using ESD techniques. However, there are no quantity management requirements. The recent update to stormwater management requirements in the Plumtree Branch and Tiber Branch watersheds also added quantity management requirements for redevelopment in those watersheds.

Requiring stormwater management for redevelopment sites offers a significant opportunity to improve water quality and quantity controls for stormwater runoff in areas that were developed prior to current stormwater management regulations. The County should ensure redevelopment is designed and implemented to reduce stormwater runoff and pollutant loadings to the maximum extent practicable. The County should also consider creating incentives for new development and redevelopment to provide on-site or off-site stormwater management that exceeds minimum regulatory requirements.

### **Stormwater Management Facilities**

Stormwater management systems must be regularly inspected and maintained and, as they age, deteriorated systems must be upgraded or replaced. The County is required by both state and local legislation to conduct inspections of stormwater management facilities every three years. There are approximately 11,000 stormwater management facilities in the County, and approximately 1,634 of these are public facilities maintained by the County.

In general, the County shares maintenance responsibilities with homeowners associations for residential facilities located on open space lots, while non-residential facilities are privately maintained. With increased use of ESD, small treatment facilities have and will continue to become more prevalent. These types of facilities can include downspout infiltration areas or drywells, and bioretention facilities or rain gardens that can be located on private residential lots. The ability to inspect and maintain these facilities over time is an area of concern. Developments with ESD have multiple facilities, which require increasing county resources for inspections. Routine maintenance of ESD facilities located on individual residential lots becomes the responsibility of the individual homeowner, resulting in property owner education and maintenance enforcement issues. Funding for County inspection and maintenance of stormwater management facilities is through the Watershed Protection and Restoration Fund, which is discussed later in this chapter under Managing Natural Resources by Watershed. The County should evaluate alternatives for improving, enforcing, and funding long-term inspection and maintenance of stormwater management facilities, particularly those facilities located on private residential lots.



#### **EH-5 Policy Statement**

Evaluate and improve stormwater management requirements to enhance climate change resilience.

#### **Implementing Actions**

- 1. Conduct a Accelerate completion of the flooding vulnerability assessment to determine which watersheds are susceptible to chronic flooding under current and expected future precipitation patterns, and revise capital project priorities and investments accordingly.
- 2. Update stormwater management design standards to address current and expected future precipitation patterns. Consider adding quantity management requirements, including management for short-duration, high-intensity storms in vulnerable watersheds.
- 3. Evaluate opportunities to further reduce stormwater runoff and pollutant loadings when redevelopment occurs.
- 4. Continue to use Accelerate use of a nature-based or green stormwater infrastructure approach (bioretention, swales) in combination with a built or gray infrastructure approach (pipes, ponds) to address flood mitigation and adaptation, to maximize ecological benefits.
- 5. Evaluate alternatives for improving, enforcing, and funding long-term inspection and maintenance of stormwater management facilities, particularly those facilities located on private residential lots.

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#### Bee City USA

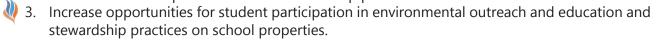
In 2019, the County Executive signed an Executive Order designating Howard County as a Bee City USA, committing the County to support and encourage healthy pollinator habitat creation and enhancement. This Executive Order notes that bees and other pollinators are responsible for reproduction in almost 90% of the world's flowering plants, including fruits and vegetables, but they have experienced population declines in the United States due to habitat loss, poor nutrition, pesticides, parasites, diseases, and climate change. Under this Executive Order, the County agreed to work with the Howard County Conservancy to enhance understanding among county staff and the public about the vital role that pollinators play and what each person can do to sustain them. Identified techniques include developing and implementing a program to create or enhance pollinator-friendly habitat on public and private land, and adopting an integrated pest management plan designed to prevent pest problems, reduce pesticide use, and expand the use of non-chemical pest management methods.

#### **EH-11 Policy Statement**

Encourage individual environmental stewardship in daily activities on private and public property.

#### **Implementing Actions**

- 1. The County should continue to shall provide leadership by incorporating environmentally sensitive site development and property management practices on county properties.
- 2. Continue existing and expand current outreach programs to promote and assist private property owners with the implementation of stewardship practices.



#### **EH-12 Policy Statement**

Commit to and support the County's designation as a Bee City USA.

#### **Implementing Actions**

- 1. Integrate pollinator-friendly practices into county policies, programs, and capital projects.
- 2. Incorporate improvements to the County's pest management policies and practices as they relate to pollinator conservation.
- 3. Develop and implement a program to create and enhance pollinator-friendly habitat on public and private land.

# Managing Mineral Resources

A 1981 Maryland Geological Survey study identified Howard County's principal mineral resources as sand and gravel, which are of great importance to the construction industry. These resources are confined mainly to the Coastal Plain portion of the County, specifically from the Howard and Anne Arundel County border westward to approximately midway between Route 29 and Interstate 95. The Maryland Geological Survey also indicates there is potential for crushed stone production west of Interstate 95, based on mineral resources endemic to the Piedmont region of Howard County, but locations were not identified.

The Maryland Department of the Environment (MDE) issues mining permits per the Surface Mining Act of 1975. MDE identifies three mining operations in Howard County–one in Marriottsville, and two in Jessup. However, one of the Jessup facilities is no longer mining. Both active facilities quarry stone or hard rock. Sand is no longer mined in Howard County.

Howard County's Zoning Regulations allow quarries as conditional uses in rural and industrial areas, subject to certain approvals and limitations. Pre- and post-extraction planning and ongoing management are required to ensure mining operations do not impact quality of life in adjacent neighborhoods. Existing infrastructure, such as roads, must be sufficient. Final use of a mined site is planned prior to any extraction. While it is not anticipated that quarry activities will cease during the planning horizon for HoCo By Design, if they do, a planning effort should be undertaken to identify potential reuse of the sites.

Industrially zoned areas, where mining is a conditional use, are primarily in the Route 1 Corridor and coincide with the Coastal Plain area of the County. This could afford potential opportunities for additional mining, if feasible, but such activities seem unlikely, given existing and planned development in the Corridor.

#### **EH-13 Policy Statement**

Continue to balance the potential for mineral resource extraction with other land uses.

#### **Implementing Actions**

1. Continue to allow mineral resource extraction as a conditional use in the Zoning Regulations in appropriate locations.

Та	ble 10-1: Implementation Matrix		
			Timeframe
	Policy and Implementing Actions	Lead Agency	(Mid-Term five-year, Long-Term six+ years, Ongoing)
	F-1 - Provide limited and predictable Planned Service Area exp	ansions.	
1.	Planned Service Area expansions should include a development proposal that is consistent with the General Plan.	DPZ	Ongoing
2.	Any Planned Service Area expansion shall establish a transition that is compatible with and enhances surrounding communities, and provides an environmental benefit.	DPZ	Ongoing
3.	Any Planned Service Area expansion shall meet the criteria above.	DPZ	Ongoing
EH	-1 - Continue to support the County's ecological health.		
1.	Integrate the goals of protecting and restoring the County's ecological health when updating county programs and policies.	ocs	Mid-Term
		DPZ	
		DPW	
		DRP	
		HCHD	
2.	Ensure adequate funding for programs and measures to protect	ocs	Ongoing
	and restore the County's ecological health.	DRP	
		DPW	
		HSCD	
		Elected	–
3.	Create a dedicated funding source, as was done for the Agricultural Land Preservation Program, for environmental programs.	DPZ	Mid-Term
	Land Preservation Program, for environmental programs.	OCS	
		Elected Officials	
		OOB	
4.	Establish a natural resource protection goal for the County and	ocs	Mid-Term
	each major watershed to help protect biodiversity and mitigate climate change.	DPZ	

Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five year, Long-Ter six+ years,
EH-2 - <del>Seek to integrate</del> <u>Integrate</u> climate change mitigation and adap programs and policies <u>receiving county funds, including the Howard (</u>		
1. Ensure Accelerate implementation of the Howard County Climate Action Plan update continues to maximize opportunities to mitigate and adapt to climate change with clear goals and strategies and ensure that the programs and policies of each department and agency are aligned with the plan's goals and strategies	ocs	Mid-Term
2. Evaluate and enhance opportunities where needed for climate change mitigation and adaptation measures in the Subdivision and Land Development Regulations and Zoning Regulations, such as natural resource protection and the provision of renewable energy.	<b>DPZ</b> OCS	Ongoing
3. Enhance county design requirements for county infrastructure and public and private buildings, to ensure these structures will be resilient under projected future weather patterns and minimize resource consumption.	DPW DILP OCS DPZ Private Partners	Ongoing
<ol> <li>Review and update county Green         Building requirements for opportunities to enhance the sustainability of public and private buildings.     </li> </ol>	DILP DPW DPZ OCS Private Partners	Mid-Term
<ol> <li>Identify and ensure economically-vulnerable communities, businesses, and households have the resources necessary for mitigation and adaptation measures.</li> </ol>	OHRE OCS DPW HCHD HCEDA	Ongoing
6. Accelerate inclusion of on-site renewable power generation on appropriate existing and new rooftops, canopies and covers.	DILP DPW DPZ OCS	Ongoing
7. Refuse permitting to expand or extend fossil fuel infrastructure on county land.	DPZ OCS	Ongoing

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		Timeframe
Policy and Implementing Actions	Lead Agency	(Mid-Term five-year, Long-Term six+ years, Ongoing)
EH-3 - Ensure the Subdivision and Land Development Regulation vide adequate protection for sensitive environmental resources vedevelopment.		
. Evaluate and enhance protections, including sediment and erosion	DPZ	Mid-Term
ontrol, where needed for sensitive environmental resources, such as vater resources, steep slopes, and rare, threatened, and endangered pecies, in the Subdivision and Land Development Regulations.	HSCD	
2. Explore whether cluster development may also be appropriate in other residential zoning districts during the zoning regulation update process.	DPZ	Mid-Term
EH-4 - Incentivize additional resource protection and restoration ment and redevelopment.	measures	within new develop-
1. Consider increased use of a density exchange overlay district, in both the West and the East, to protect sensitive resources in areas with unique conditions or resources.	DPZ	Mid-Term
2. Consider incentives to encourage environmental protection and	DPZ	Mid-Term
restoration when properties are developed or redeveloped, such as	HCEDA	
tax credits, density bonuses, housing allocations, and public-private partnerships.	Private Partners	
	DPZ	Mid-Term
3. Evaluate and strengthen the Green Neighborhood Program to ensure		
3. Evaluate and strengthen the Green Neighborhood Program to ensure adequate incentives will increase program use and incorporate new options, such as increased moderate income housing units.	DILP	

		Timeframe
Policy and Implementing Actions	Lead Agency	(Mid-Term five-year, Long-Term six+ years, Ongoing)
EH-5 - Evaluate and improve stormwater management requirement resilience.	ents to en	hance climate change
1. Conduct a Accelerate completion of the flooding vulnerability assessment to determine which watersheds are susceptible to chronic flooding under current and expected future precipitation patterns, and revise capital project priorities and investments accordingly.	DPW	Ongoing
Update stormwater management design standards to address current and expected future precipitation patterns. Consider adding quantity management requirements, including management for	DPZ	Mid-Term
	DPW	
short-duration, high-intensity storms in vulnerable watersheds.	OCS	
3. Evaluate opportunities to further reduce stormwater runoff and	DPZ	Mid-Term
pollutant loadings when redevelopment occurs-	DPW	
	OCS	
4. Continue to use Accelerate use of a nature-based or green	DPW	Ongoing
stormwater infrastructure approach (bioretention, swales) in combination with a built or gray infrastructure approach (pipes, ponds) to address flood mitigation and adaptation, to maximize ecological benefits.	DPZ	
	OCS	
	Private Partners	
Evaluate alternatives for improving, enforcing, and funding long-term inspection and maintenance of stormwater management facilities, particularly those facilities located on private residential lots.	DPW	Mid-Term
	Private Partners	

**Table 10-1: Implementation Matrix** 

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Table 10-1: Implementation Matrix		
Policy and Implementing Actions	Lead Agency	Timeframe (Mid-Term five-year, Long-Term six+ years, Ongoing)
EH-8 - Expand implementation of the Green Infrastructure Netwo	ork Plan.	
Integrate the Green Infrastructure Network Plan implementation actions into the relevant county plans and programs.	DPZ DRP OCS DPW	Ongoing
Consider use of an overlay zoning district or other regulatory measures to target resource protection measures for the Green Infrastructure Network.	DPZ	Mid-Term
3. Establish an easement or land purchase program to protect uncommitted parcels within the Green Infrastructure Network.	<b>DPZ</b> OCS	Mid-Term
4. Amend county design standards for roads, bridges, and culverts to facilitate safe passage for wildlife at county road crossings within the Green Infrastructure Network.	DPZ OCS DPW OOT	Mid-Term
5. Conduct studies of existing resource conditions and wildlife use within the network to enhance management of the Green Infrastructure Network.	<b>DPZ</b> OCS	Long-Term
6. Consider expansion of the Green Infrastructure Network to include smaller habitat areas that provide 'stepping stones' to the primary network.	<b>DPZ</b> OCS	Mid-Term
EH-9 - Continue to promote agricultural land preservation, recog the Rural West is a diminishing resource.	nizing tha	nt uncommitted land in
Build on the successes of the Agricultural Land Preservation     Program (ALPP) and continue acquiring land through the ALPP.	<b>DPZ</b> OCS	Ongoing
2. Continue to promote other land preservation options, such as the dedication of easements to the County through the subdivision process, the purchase of easements by the Maryland Agricultural Land Preservation Foundation program, and the donation of easements to nonprofit land trusts.	DPZ	Ongoing
3. Continue to implement the Agricultural Land Preservation Program easement stewardship activities to monitor compliance.	<b>DPZ</b> OCS	Ongoing
EH-10 - Expand the scope of potential uses of the Agricultural La	nd Preserv	vation Program Fund.
1. Work with various stakeholders to identify areas for the most appropriate and effective potential uses of the fund, including support for environmental programs, while ensuring continued funding of the ALPP.	OCS	Mid-Term

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		Timeframe
Policy and Implementing Actions	Lead Agency	(Mid-Term five-year, Long-Term six+ years, Ongoing)
H-11 - Encourage individual environmental stewardship in dail roperty.	y activities o	on private and public
. The County should continue to shall continue to provide leadership	DPW	Ongoing
by incorporating environmentally sensitive site development and property management practices on county properties.	DRP	
	DPZ	
. Continue existing and expand current outreach programs to promote and assist private property owners with the	ocs	Ongoing
implementation of stewardship practices.	DRP	
	HSCD	
	Private Property Owners	
. Increase opportunities for student participation in environmental	HCPSS	Ongoing
outreach and education and stewardship practices on school properties.	HSCD	
H-12 - Commit to and support the County's designation as a Bo	ee City USA.	
. Integrate pollinator-friendly practices into county policies,	ocs	Mid-Term
programs, and capital projects.	DRP	
	DPW	
	DPZ	
. Incorporate improvements to the County's pest management	ocs	Ongoing
policies and practices as they relate to pollinator conservation.	DRP	
Develop and implement a program to create and enhance	ocs	Mid-Term
pollinator-friendly habitat on public and private land.	DRP	
	Private Partners	
H-13 - Continue to balance the potential for mineral resource e	xtraction w	ith other land uses.
. Continue to allow mineral resource extraction as a conditional use in the Zoning Regulations in appropriate locations.	DPZ	Ongoing

Chapter 11: Implementation IMP-22