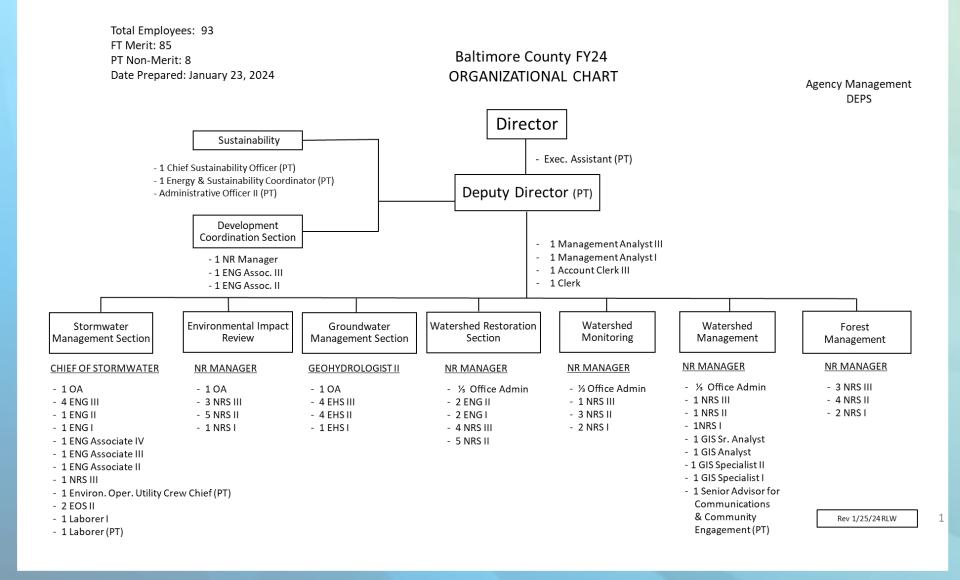
# **Department of Environmental Protection and Sustainability**



# **Director: Horacio Tablada**

# **Department of Environmental Protection and Sustainability (DEPS)**



# **Capital Program Drivers**

- MS4/NPDES Permits
  - New 5-year MS4 Permit issued Nov. 2021
- Impervious Surface Restoration 3,167 acres
- Chesapeake Bay TMDL
- Local TMDL

# **MS4 Permit: New and Revised BMPs**

#### New

- Floating Treatment Wetlands
- Conservation Landscaping
- Forest Conservation
- Urban Soil De-compaction

#### Expanded

- Outfall Stabilization
- Overachieving SWM facilities:
  - Green Stormwater Infrastructure bonus
  - "Watershed Management" bonus

#### Revised

- Storm Drain Cleaning: separate credit for organic and inorganic debris
- Illicit Discharge Detection & Elimination: limiting cap placed on credit from illicit discharge detection and elimination (IDDE)
- Street Sweeping: must document higher sweeping frequency with upgraded equipment



# **MS4 Permit: New Salt Management Plan**

"The County shall reduce the use of winter weather deicing and anti-icing materials, without compromising public safety, by developing a County Salt Management Plan (SMP)"

#### Ahead of the curve:

- New DPWT Highways equipment
- DPWT tracking and reporting deicing usage for each winter storm

#### **Down the road:**

- "Salt Academy" to train County staff and contractors
- Salt management outreach to residents



# **DEPS Capital Improvement Projects**

- Stream Restoration
- Shoreline Stabilization & Enhancement
- Stormwater Facility Maintenance & BMP Improvements
- Reforestation



# **DEPS Capital Projects: Resiliency/Sustainability Efforts**

	Stream Restoration	Shoreline Stabilization & Protection	Stormwater Maintenance & BMP Improvements	Reforestation
Nuisance Flooding	Designed to not impact private/public assets	May attenuate frequent events	Mitigates runoff from development; reduces peak flows	Attenuates through canopy interception & vegetative uptake
Riverine Flooding	May be intentionally increased to reduce flow velocities & erosion (approach/outcome dependent)		Mitigates runoff from development; reduces peak flows	Attenuates through canopy interception & vegetative uptake
Sea Level Rise		May become ineffectual, but must be designed for current condition to be functional		
Severe Weather	Reduces erosion for a range of storm events	Attenuates erosion by interrupting wave action; revegetation facilitates soil cohesion	Mitigates runoff from development; reduces peak flows	Attenuates runoff through vegetatvie uptake and erosion by improving soil cohesion
Protective Measures	Attenuates erosion and protects public/private properties & infrastructure such as sanitary sewer, bridges & culverts	Protects public and private properties from erosion	Mitigates runoff from development; reduces peak flows	
Atmospheric Temperature Increase	Riparian corridor revegetation attenuates by blocking solar radiation			Facilitates biosequestration of atmospheric carbon dioxide; attenuates by blocking solar radiation

# **DEPS – Stream Restoration**



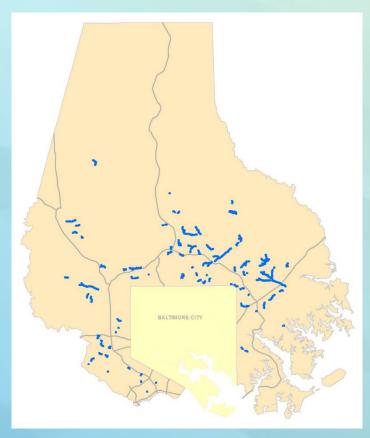
**BEFORE** 

Miller Run Stream Restoration, Catonsville



## Current & Future Capital Waterway Improvement Projects Stream Restoration

- From 1994 FY24: 100 projects were completed, costing approximately \$169M
- Request for \$7.8M in FY25 towards 6 projects, including funding for the design of 3 new projects and construction of 3 current projects
- Proposing \$16M to implement 9 projects for FY26 through FY28



## **DEPS – Shoreline Stabilization & Enhancement**



AFTE

BEFORE

CHESTERWOOD PARK SHORELINE ENHANCEMENT

## Current & Future Capital Waterway Improvement Projects Shoreline Stabilization & Enhancement

- From 1991 FY24: 42 projects completed, costing approximately \$22M
- The FY25 budget request is \$1M for design of 3 projects
- For FY26 through FY28, proposing \$13M for the implementation of 5 new projects and the construction of 3 projects currently in design

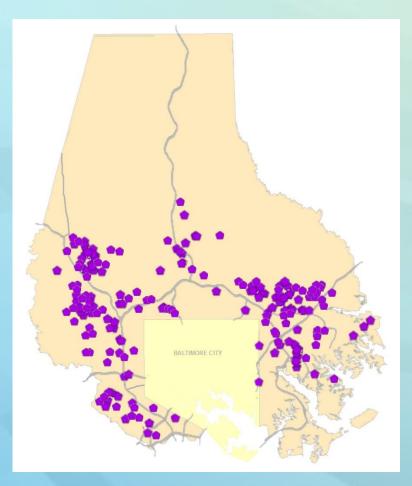


# **DEPS – Stormwater Facility Maintenance & BMP Improvements**



## Current & Future Capital Waterway Improvement Projects Stormwater Facility Maintenance & BMPs

- From 2013 FY24: 174 projects were completed costing approximately \$14M
- FY25 request of \$3.6M includes funding for 10± water quality projects, 10± BMP repairs, and triennial maintenance of 425± facilities
- Proposing 10 projects costing \$3.6M per year for FY26 through FY28; request includes repairs and triennial maintenance for existing facilities



## **Stormwater Facility Maintenance & BMPs Floating Treatment Wetlands**

- \$136K spent on preparation, purchase, and installation of floating treatment wetland mats at one stormwater management facility as a pilot study
- Pilot study: determining water quality benefit for future BMPs
- Dissolved oxygen & temperature sensors deployed at pilot and control facilities.





# **DEPS – Reforestation**

#### **Rural Reforestation**



#### **Urban Reforestation**

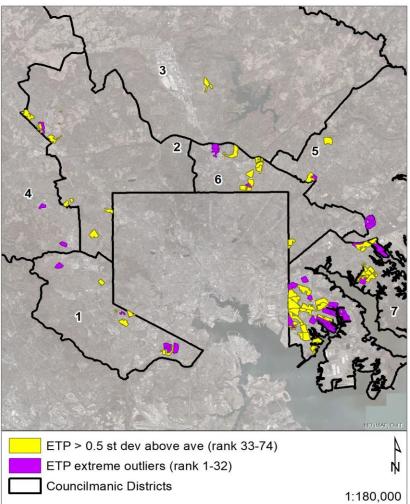


#### 1,000 Street Trees



# Reforestation Operation ReTree: Location Selection Results

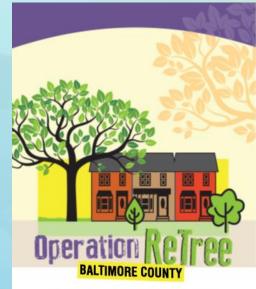
- Lower income households tend to live in areas with less tree canopy
- Higher population density correlates with lower tree canopy
- ARPA and CBT grant are current funding sources



### **Reforestation Operation ReTree**

Tree Canopy v. Income-Environmental Justice & Equity





Help bring back the beautiful tree-lined strees and shady yards to the communities of Baltimore County!

Sign up today for your **free** "family tree" to be planted in front of your house or in a side yard.

# **Rural and Urban Reforestation Effort Update**

- Over 4,343 urban trees were removed between 2014-2022
- In FY20-FY23, the County granted Blue Water Baltimore nonprofit \$30K annually to plant 200 trees within the URDL to replace removed street trees
- County Executive Olszewski set aside \$625K for 1,000 street trees each year in FY23 and again in FY24
- 2,679 Street trees will be planted by spring 2024

1,000 Street Trees planted in these communities:

- Towson
- Owings Mills
- Dundalk
- Woodlawn
- Parkville



## Current & Future Capital Waterway Improvement Projects Reforestations and Tree Maintenance

- From 2013 FY24: 312 projects were completed costing approximately \$4.25M
- FY25 request of \$700K includes funding for 25 acres of rural reforestation and 10± tree maintenance projects
- Proposing 45 acres of rural reforestation projects costing \$1M per year for FY26 through FY28 and 18± tree maintenance projects costing \$350K per year for FY26 through FY28



# **Questions?**



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