

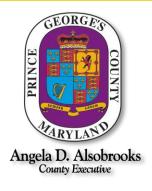




# Department of Public Works and Transportation

April 4, 2024









## Office of the Director

Prince George's County, DPW&T

Presented by Rodney Streeter Special Assistant to the Director



## Growing Green With Pride

























endorsement, recommendation, or favoring by Prince George's County, Maryland.

The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by Prince George's County, Maryland



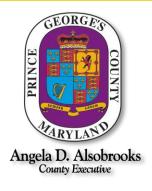
## Welcome Deputy Director!





Welcome DPW&T's newest addition to our leadership team!

Deputy Director Stacey Smalls







## Office of Highway Maintenance

Prince George's County, DPW&T





## Snow Events









- OHM ran a successful snow season with 7 snow events that ran from December 15th through March 15th.
- OHM staff worked extremely hard operating between 12-hour shifts.
- The County Executive Ms. Angela Alsobrooks visited our command center, met with drivers, District Managers, Foreman, clerks, and members of the command staff. The County Executive provided hot chocolate and donuts and thanked everyone for their hard work. She also thanked crews over the Dispatch system.
- OHM team is currently crafting a detailed after-action report that will also include budget information.



## Contracted Tree Trimming



## The Tree Team is doing amazing work reducing 311 numbers and addressing storm events!

- Tree trimming is accomplished by service request and/or inspections and issued to contracted vendors for scheduling and completion. Tree and stump removals are provided when the tree is found to be dead or when dead tree limbs fall to the ground because of inclement weather and stormy conditions.
- OHM has successfully completed all tree Motorola requests!
- OHM is continuing to develop strategic processes and exploring new contracts to address tree 311 requests.





### Precision Concrete Horizontal Cutting



#### Innovative Solutions to address Sidewalk Requests!

OHM has contracted with Precision Concrete Cutting to evaluate the condition of sidewalks in 19 communities throughout the county to remove the tripping hazards. So far PCC has evaluated over 65 miles of sidewalks throughout 11 communities and have noted over 10,000 tripping hazards and 633 areas where panels need to be replaced. Over 4,500 repairs have been made in a timely manner. PCC is continuing to evaluate sidewalks in additional communities:

- Maplewood Subdivision Woodlawn Subdivision, Councilmanic District
- Montpelier Woods, Councilmanic District 1
- Cool Springs, Councilmanic District 2
- Hillmeade Estates, Councilmanic District 4
- Willow Hills, Councilmanic District 5
- Fairwood Community, Councilmanic District 6
- Fort Washington Estates, Councilmanic District 7
- Montpelier Ridge, Councilmanic District 1
- Hampshire Knolls, Councilmanic District 2
- Rutledge Subdivision, Councilmanic District 3
- Wood Pointe, Councilmanic District 3
- Highbridge Estates, Councilmanic District 4
- Yorkshire Knolls, Councilmanic District 5
- Valleybrooke Townes, Councilmanic District 6
- Piscataway Hills, Councilmanic District 7
- Tantallon South, Councilmanic District 8
- Broad Creek Estates, Councilmanic District 8















## Residential Street Sweeping Program







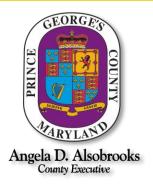




- DPW&T will implement a countywide residential sweeping program (RSSP) in two phases:
  - i. Phase I will utilize three (3) sweepers and service approximately 716 curb-miles of roadway per month
  - ii. Phase II will utilize six (5) sweepers and service approximately 1,571 curb-miles of roadway per month.
- The frequency will be monthly (every 5 weeks) for Phase I beginning in March 2024 and Phase II tentatively in Fall 2024.
- New positions have been created for this new initiative and interviews are scheduled for RSSP Operators and Supervisor.
- The GIS Team has designed sweeping areas throughout each District. These areas will make up sweeping zones.
- RSSP Team collaborated with the Communications Team and the GIS Team to develop a distribution plan for public consumption.











## Office of Storm Drain Maintenance

Prince George's County, DPW&T

Presented by Joanna Smith Associate Director, Office of Storm Drain Maintenance



### OSDM: What We Do?



**Joanna Smith Associate Director** 

| Storr | <u>nwater</u> | Infrastructure |
|-------|---------------|----------------|
| Rest  | oration       | <u>and</u>     |
| Impr  | ovemer        | <u>ıt</u>      |

#### Jet-Vac Storm Drain Maintenance

**SWM Ponds Maintenance** and MS4 Permit and **Consent Decree** 

#### **Channel Maintenance &** Reconstruction

Right Tree Right Place & Pumping Stations - Storm **Median Beautification** 

**Monitoring and Flood** Protection

Levees Operations and Maintenance

- Stormwater Infrastructure Improvement and Repairs
- Minor CIP Projects
- Small Scale Drainage Improvement Projects
- Outfall Restoration and Rehabilitation
- Contract Management

- Storm Drain Pipe and Inlet cleaning
- Service Request Response (PGC311)
- Watershed Community Cleanup Program with DoE
- Contract Management

- NPDES Compliance
- SWMFs Maintenance
- Triennial Inspections
- SWMF Rehabilitation
- Structural Repairs
- Vegetation Management
- Animal Control
- Contract Management

- 27 Miles of Stormwater Channels Maintenance
- 1200 Open Conveyance swales Mainténance
- Structural Repairs
- Vegetation Management
- Sediment and Debris Removal
- Animal Control

- Urban tree canopy
- Air Quality Improvement
- Replacement of hazardous trees
- Median Beautification
- Community Outreach
- **Grant Management**
- Contract Management

- Monitors and Operates 5 Pumping Stations
- Monitor forecasted Storm Events
- Implements Rain Action Plan and Coordination with DoE and OEM
- Updates Operation and Maintenance Manuals
- **Functional Maintenance** and Upgrades of mechanical assets

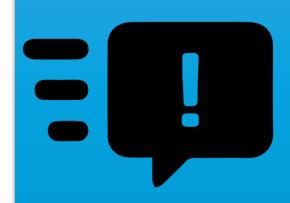
- Maintenance of 8 Levee Systems
- Vegetation Management
- Animal Control
- Stabilization & Repairs
- Maintenance of internal drainage systems
- Sediment and Debris Removal



## Drainage Concerns and Improvements







Resolve customer service requests (311)

800+ stormwater drainage facilities



**1200+** by 2025

100 - 200 small drainage projects per year



+008 miles of storm drain



## Flooding Awareness



## April is Maryland Flood Awareness Month Event!!

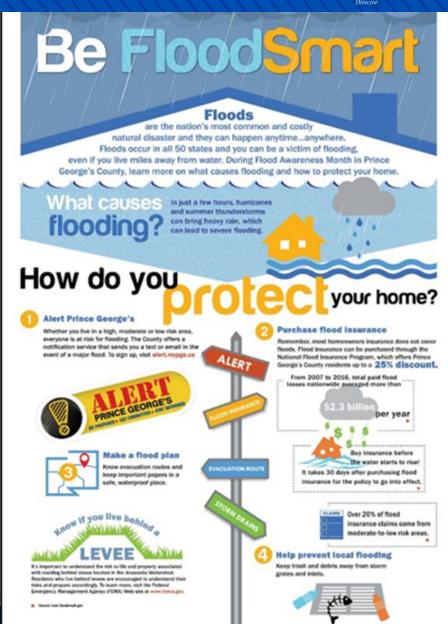
The State of Maryland is hosting two events for Flood Awareness Month: 18, April 2024: How communities are preparing for flooding (12-1pm ET and 6-7pm ET)

<a href="https://md-resiliency-partnership-maryland.hub.arcgis.com/pages/events">https://md-resiliency-partnership-maryland.hub.arcgis.com/pages/events</a>

Flooding is the number one natural hazard in Maryland and are four times more likely to occur than a fire.

The County has experienced extreme and intense summer storm events the last several years. Generally, the timeline for the more intense storms in Maryland has historically occurred from **June 1st through October 1st.** 

Severe storms are defined as those forecasted to produce more than 1 inch of precipitation during the summer months, characterized by their unpredictable nature and short durations (less than 30 minutes).





## Prepare for the Storm



# When a Severe/Intense storm is predicted (rainfall rates at 1 inch per hour or more for an hour), the County will:

- DPW&T activates Rain Plan, triggering pump station operations, jet-vac, and inspectors to prepare the County's infrastructure for the incoming storm when the forecast calls for rainfall rates at 1 inch per hour or more for an hour,
- DPW&T will inspect chronic flooding locations and clear debris from inlets and storm drains before predicted storms.
- To assist residents in mitigating potential flooding incidents, DPW&T will provide sandbag pick-up locations at three designated sites 48-72 hours before the onset of severe storms between June 1st and October 31st.
- During this timeframe, residents are encouraged to consult social media platforms and the agency's website for further details.





But we all have a role to play......



## We all have a role to play:



**Abutters Ordinance:** Homeowner is responsible for cleaning small debris, leaves and small trash.

County Code Sec. 23-151

It shall be the duty of the owner or lessor of any real property, improved or unimproved, unless such duty has been delegated to a lessee in actual possession, as the case may be, to prevent the deposit of dirt, sediment, debris, gravel, oil, litter, or any other matter, including portable storage containers in a road right-of-way, or in any drain or ditch designed to carry surface water from a road right-of-way, whether improved or not. For the purpose of this Section, the deposit of oil shall include the drainage or leakage of oil, transmission fluid, antifreeze, and similar substances from a vehicle or machine in addition to the discharge or dumping of such substances by any other means. The prevention of the deposit of silt in the road right-of-way shall not apply where a temporary approved sediment trapping device has been constructed in the right-of-way as part of an ongoing development construction project. It shall also be the person's responsibility to prevent the formation of algae on sidewalks located within the right-of-way.

Keeping your storm drain or inlets from clogging is easy and always preventable.

#### You can start by always

- Remove debris and trash from the grates when you see them.
- Clear debris from the curb line and on top of catch basins so stormwater can flow freely down the street and into the storm drain system.
- Not dumping trimmings, grass, or leaves over the inlet, ditches, or curb line can assist in preventing clogging.
- Report concerns to assist OSDM operation by Submit a PGC311 Request



## Why are we talking about flooding?



| PDS-based precipitation frequency estimates with 90% confidence intervals (in inches) <sup>1</sup> |                            |                                     |                            |                            |                         |                            |   |                            |                            |                         |
|--|----------------------------|-------------------------------------|----------------------------|----------------------------|-------------------------|----------------------------|---|----------------------------|----------------------------|-------------------------|
| Duration   |                            | Average recurrence interval (years) |                            |                            |                         |                            |   |                            |                            |                         |
| Duration   | 1                          | 2                                   | 5                          | 10                         | 25                      | 50                         | 100                                     | 200                        | 500                        | 1000                    |
| 5-min  | 0.358<br>(0.325-0.394)     | 0.430<br>(0.390-0.473)              | <b>0.511</b> (0.463-0.563) | <b>0.570</b> (0.515-0.628) | 0.646<br>(0.580-0.712)  | <b>0.702</b> (0.627-0.775) | <b>0.758</b> (0.672-0.838)              | <b>0.812</b> (0.716-0.902) | 0.882<br>(0.768-0.985)     | 0.937<br>(0.809-1.05)   |
| 10-min   | <b>0.572</b> (0.519-0.629) | 0.688<br>(0.624-0.756)              | <b>0.818</b> (0.741-0.901) | <b>0.912</b> (0.824-1.00)  | 1.03<br>(0.924-1.14)    | <b>1.12</b> (0.998-1.23)   | <b>1.21</b> (1.07-1.33)                 | <b>1.29</b> (1.13-1.43)    | <b>1.40</b> (1.22-1.56)    | <b>1.48</b> (1.27-1.66) |
| 15-min   | <b>0.715</b> (0.649-0.787) | 0.864<br>(0.784-0.950)              | 1.03<br>(0.938-1.14)       | <b>1.15</b> (1.04-1.27)    | <b>1.31</b> (1.17-1.44) | <b>1.42</b> (1.26-1.56)    | <b>1.52</b> (1.35-1.68)                 | <b>1.63</b> (1.43-1.80)    | <b>1.76</b> (1.53-1.96)    | <b>1.85</b> (1.60-2.08) |
| 30-min   | 0.981<br>(0.889-1.08)      | <b>1.19</b><br>(1.08-1.31)          | <b>1.47</b> (1.33-1.62)    | <b>1.67</b> (1.51-1.84)    | 1.93<br>(1.73-2.13)     | <b>2.13</b> (1.90-2.35)    | <b>2.33</b> (2.07-2.58)                 | <b>2.53</b> (2.23-2.81)    | <b>2.79</b> (2.43-3.12)    | 3.00<br>(2.59-3.37)     |
| 60-min   | <b>1.22</b> (1.11-1.35)    | <b>1.50</b> (1.36-1.65)             | <b>1.89</b> (1.71-2.08)    | <b>2.18</b> (1.97-2.40)    | <b>2.57</b> (2.31-2.84) | <b>2.89</b> (2.58-3.19)    | 3.21<br>(2.85-3.55)                     | <b>3.55</b> (3.13-3.94)    | <b>4.01</b><br>(3.49-4.48) | <b>4.38</b> (3.78-4.92) |
| 2-hr   | <b>1.42</b> (1.29-1.57)    | <b>1.73</b> (1.57-1.91)             | <b>2.19</b> (1.99-2.42)    | <b>2.55</b> (2.30-2.81)    | 3.06<br>(2.74-3.37)     | 3.47<br>(3.09-3.83)        | <b>3.91</b><br>(3.46-4.31)              | <b>4.36</b> (3.83-4.83)    | <b>5.01</b> (434-5.58)     | <b>5.53</b> (4.75-6.21) |
| 3-hr   | <b>1.52</b> (1.38-1.69)    | <b>1.85</b><br>(1.68-2.06)          | <b>2.35</b> (2.12-2.60)    | <b>2.75</b> (2.47-3.04)    | <b>3.31</b>             | 3.78<br>(3.35-4.18)        | <b>4.27</b><br>(3.75-4.73)              | <b>4.80</b> (4.18-5.33)    | <b>5.55</b><br>(477-6.19)  | <b>6.17</b> (5.23-6.93) |
| 6-hr   | <b>1.86</b> (1.69-2.07)    | <b>2.26</b> (2.05-2.51)             | <b>2.85</b> (2.58-3.17)    | 3.34<br>(2.00 5.70)        | <b>4.06</b> (3.62-4.50) | <b>4.69</b> (4.13-5.19)    | <b>5.34</b> (4.67-5.63)                 | <b>6.06</b> (5.24-6.76)    | <b>7.12</b><br>(6.06-8.00) | <b>8.01</b> (6.71-9.05) |
| 12-hr  | <b>2.25</b> (2.02-2.52)    | <b>2.71</b> (2.44-3.05)             | 3.45<br>(2.09-3.87)        | <b>4.08</b> (3.64-4.57)    | 5.04<br>(4.44 5.63)     | <b>5.87</b> (5.13-6.57)    | <b>6.50</b> (5.8 <mark>7</mark> - 7.63) | <b>7.84</b> (6.67-8.62)    | <b>9.42</b><br>(7.84-10.7) | <b>10.8</b> (8.82-12.3) |
| 24-hr  | <b>2.60</b> (2.37-2.90)    | 3.15<br>/2.87-3.52                  | <b>4.07</b> (3.69-4.53)    | <b>4.87</b> (4.40-5-41)    | <b>6.09</b> (5.47-6.73) | <b>7.17</b> (6.39–7.89)    | <b>8.40</b><br>(7.41-9.20)              | 9.78<br>(8.54-10.7)        | 11.9<br>(10.2-13.0)        | <b>13.8</b> (11.7-15.0) |

June 5, 2020: 50-100-year event

July 3, 2022: 100-200-year event

August 3, 2020: 100-500-year event

Sept. 10, 2020: 500-1000 year event

August 8, 2022: 500-year event



## NPDES SWM Pond Maintenance What to Expect?



### Regular Maintenance:

OSDM is responsible for the Functional Maintenance of 900 SWM Facilities.

- Functional maintenance of county public storm drain and stormwater management facilities shall be performed by Prince George's County.
- The property owner, homeowners association, condominium association, or business park association shall perform aesthetic maintenance of public stormwater management facilities.
- Functional maintenance shall include mowing of grass once a year
- Mowing of SWM Facilities twice a year Spring and Summer.
- Removal of debris or sediment build-up that results in clogging or loss of function- 52,000 CY of sediment removed in FY24.
- Perform Triennial Inspections as required by MDE.
  - 228 Facilities require inspections in FY24.
  - 167 Completed to date.
- Life cycle maintenance, including replacing pipes, structures, damaged or inoperable valves, stairs, trash racks, and repair to the structural integrity of embankments, outfalls, and access roads.



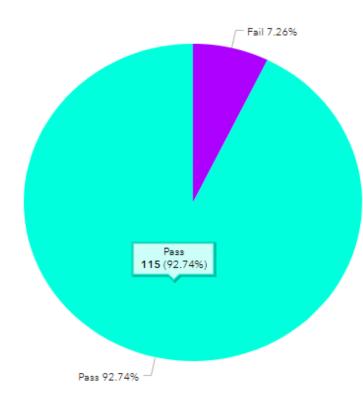
Section 5.2.5 of SWM Design Manual defines standards for public versus private storm drain and SWM systems.



## NPDES SWM Pond Maintenance & MDE Consent Decree



**Consent Decree** – 122 Failing SWM facilities and 16 Restoration BMPs were identified in the Consent Decree as failing



### How are we doing?

SWM Facilities – Consent Decree

- 92.74% completed 120 SWM Facilities are now Passing, and 7 are completed but pending post-construction reinspection.
- OSDM is on track to complete the Consent Decree by April 2024.

Consent Decree Restoration BMPs

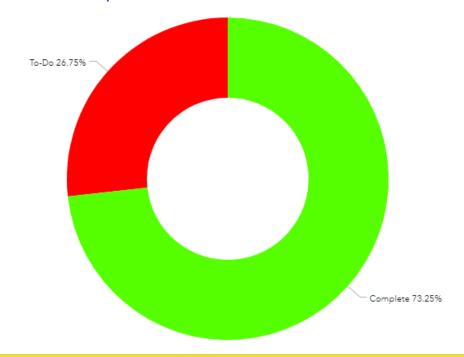
100 % completed

### **Regular Maintenance:**

- 46 Facilities restored and reinspected in FY24.
- 10 Additional Ponds scheduled for FY24

### **Triennial Inspections:**

- 228 Facilities require inspections in FY24.
- 167 Completed to date

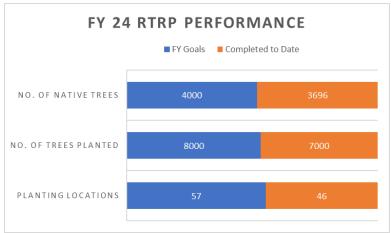




## Right Tree Right Place



DPW&T was awarded the CBT Urban Tree Grant Fund for \$1.0 Million towards RTRP.







### RIGHT TREE RIGHT PLACE

Prince George's County Tree Removal & Planting Program

Prepared By: the Neighborhood DesignCenter

#### Trees Removed & Planted Per Council District FY11-FY24

| 1 | ****   | φφφφφφφφφφφ  |
|---|--------|--|
| 2 | **     | $\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi$                         |
| 3 | **     | φφφφφφφφφ  |
| 4 | ř.     | $\varphi \varphi_{\pm}$  |
| 5 | 并并并    | $\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi$                         |
| 6 | ttttt. | $\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi$ |
| 7 | ř      | φφφφφφφ  |
| 8 | tttr   | $\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi\phi$                                 |
| 9 | ****   | φφφφφφφφφφφφφφφφφ  |











### Median Beautification Pilot



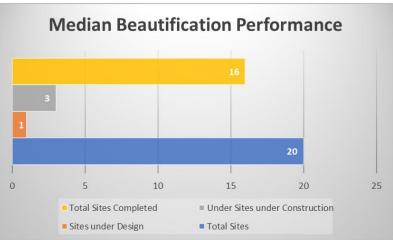
OSDM kicked off the Median Beautifications for the Fall Season – September 25, 2023.

OSDM Goal for FY 24 – Installation of Twenty (20) sites throughout the County.

16 Sites have been completed –80%

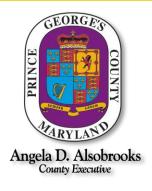


| Total Sites              | 20 |
|--------------------------|----|
| Sites under Design       | 1  |
| Sites under Construction | 3  |
| Total Sites Completed    | 16 |













## Office of Transportation

Prince George's County, DPW&T

Presented by Semia Hackett Associate Director, Office of Transportation



## Transit Vision Plan



## We're out in the community sharing our Transit Vision Plan

The Office of Transportation has been involved in many Transit Vision Plan events in County! Continuously, sharing knowledge on the Transit Vision Plan and additional transit services; Call-A-Bus, and Call-A-Cab. Participated in over 15 events reaching over 400 stakeholders: young adults, seniors, government agencies, public libraries, and community members.





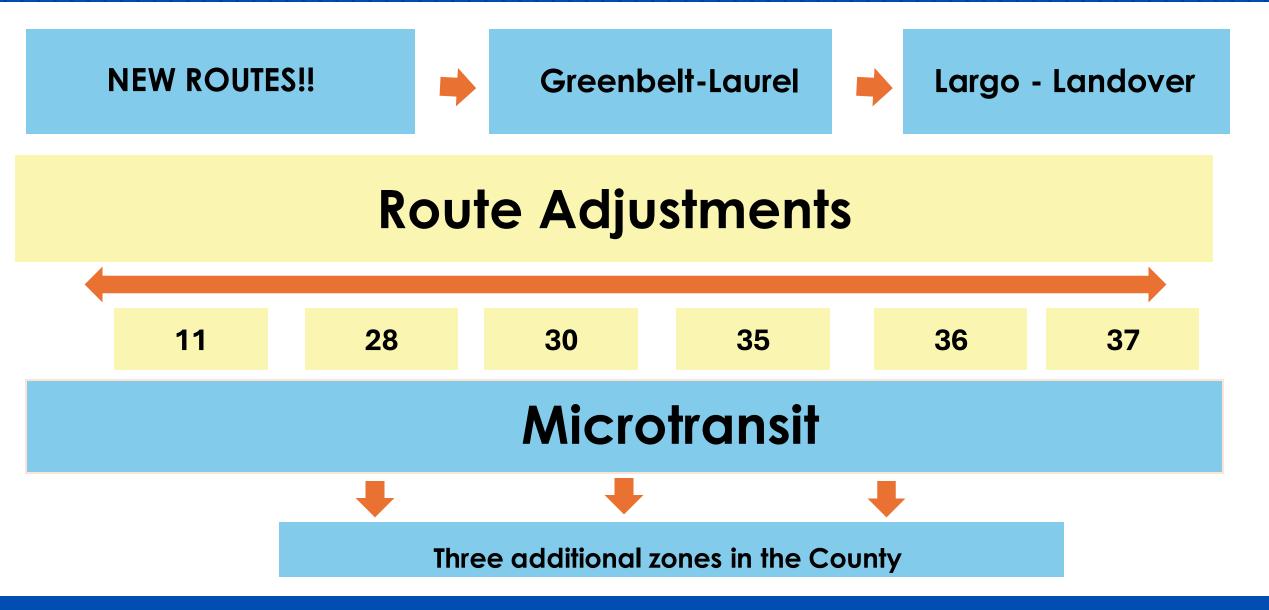






## Transit Forward OTP Improvements







## Transit Demand Management (TDM)





# Ride Smart

The mission of the RideSmart Solutions program is to achieve quantifiable mode shift to nonsingle occupancy vehicle (SOV) options for commuters and travelers in Prince George's County.



### **Upcoming Events:**

**PGCPD Community Event – March 30** 

WABA Youth Summit - April 13

Get on Board Community Day – April 25

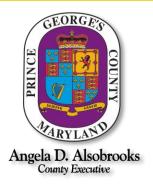
**USPTO Green Fair - May 1** 

Maryland Highway Safety Summit – May 13

Senior Information Fair – May 14

Bike-to-Work Day – May 17

M-NCPPC Senior Health & Fitness
Day – May 22







# Office of Engineering & Project Management

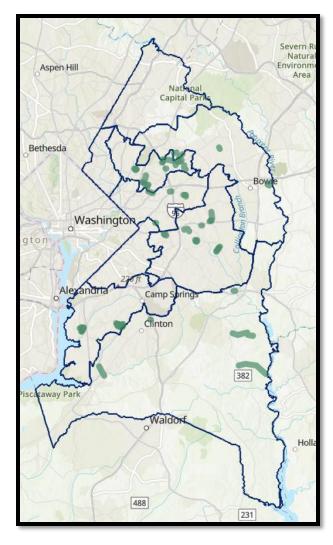
Prince George's County, DPW&T

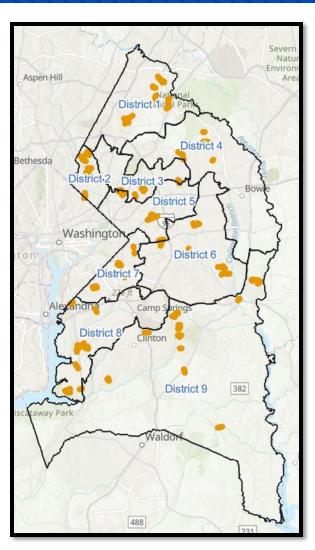
Presented by Kate Mazzara Associate Director, Office of Engineering and Project Management



### Office of Engineering and Project Management







Completed

Proposed



Mitchellville Rd.









## Stay connected with us!

See our website at dpwt.mypgc.us

