



Vienna Town Council Stormwater Management Program Update



June 5, 2023



Tonight's Presentation

- Current MS4 permit – an impactful five years
 - Permit implementation highlights
 - Chesapeake Bay TMDL action plan progress
 - Other TMDLs
 - DEQ audit
- Transitioning to a new stormwater permit
 - What will change?
 - Timeline for next five years
- Consolidation of erosion and sediment control and stormwater management regulations

2018 MS4 Permit – Greatest Hits

- Effective November 1, 2018. Set to expire October 31, 2023
- Ramped up requirements for:
 - Public education and outreach
 - Stormwater system mapping
 - Illicit discharge detection and response
 - Stormwater facility inspections
 - Staff training
 - Pollution prevention for municipal operations
- Focused on compliance with Chesapeake Bay and local water quality targets



Public Education and Outreach

- Required to have at least four public engagement activities each year
- Vienna far exceeded this minimum
- Maintained engagement even with COVID using on-line engagement
- Targeted pollution prevention focused on:
 - Youth outreach
 - Bacteria from pet waste
 - Proper use of fertilizers
 - Illicit discharges from restaurants and automotive service stations

Youth Focused Outreach



Outreach to Pet Owners

Reasons you don't

No one will notice....
It is too much trouble....
I didn't have a bag....

In nature, it's ok....
It's off the trail in the grass and bushes....
No one walks there....

It's not important....
It's dark outside....
It's raining....
It's gross....

Pick Up

Parks • Sidewalks • Yards

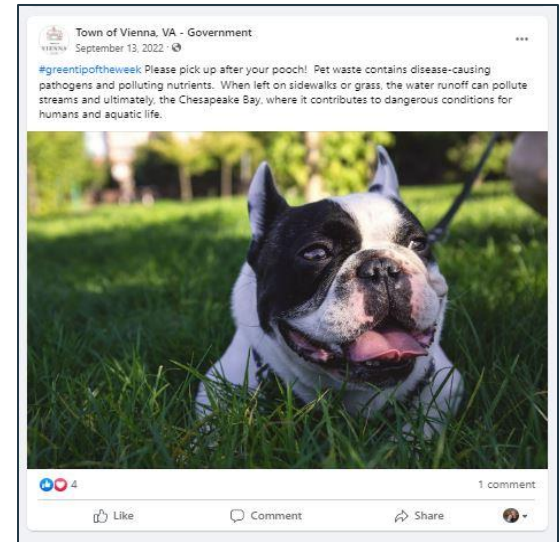


Pet Waste

Green Spaces • Hiking Paths

It is courteous and neighborly. Pet poop is not fertilizer. High protein pet diets damage and burn lawns. Someone may step in it; other animals may eat it. Pet waste spreads diseases to other pets, animals and humans — worms, parvovirus, coronavirus, giardiasis, salmonellosis, cryptosporidiosis and campylobacteriosis. Fecal waste can take as long as a year to breakdown leaving parasites and bacteria to linger in soil for years. When it rains, stormwater washes contaminants like E. coli and other organisms from the soil into local streams and watersheds. This is why we do — every time.

Reasons you do



Outreach to Restaurants



VIENNA
Public Works
Department of Public Works
127 Center Street South
Vienna, VA 22180

Discharging prohibited items into storm sewer facilities can result in fines.

Nothing but rainwater is allowed into storm drains. It is illegal, and harmful, to allow wastes, wash water, cleaning agents, or materials of any kind into the storm drain system. Rain and mishandled wash water and grease from your facilities and dumpsters carry pollutants directly into local streams and negatively impacts local streams and wildlife.

Use the QR code to implement best management practices and prevent common stormwater runoff pollution.

For information on Town Stormwater Management, visit viennava.gov/stormwater.

Community restaurants and food service workers are an essential key to keeping local streams and watersheds healthy.

NO DUMPING
VIENNA, VA
DRAINAGE TO CHESAPEAKE BAY

Your local watershed drains to the Potomac River and Chesapeake Bay!



More Work to Do!

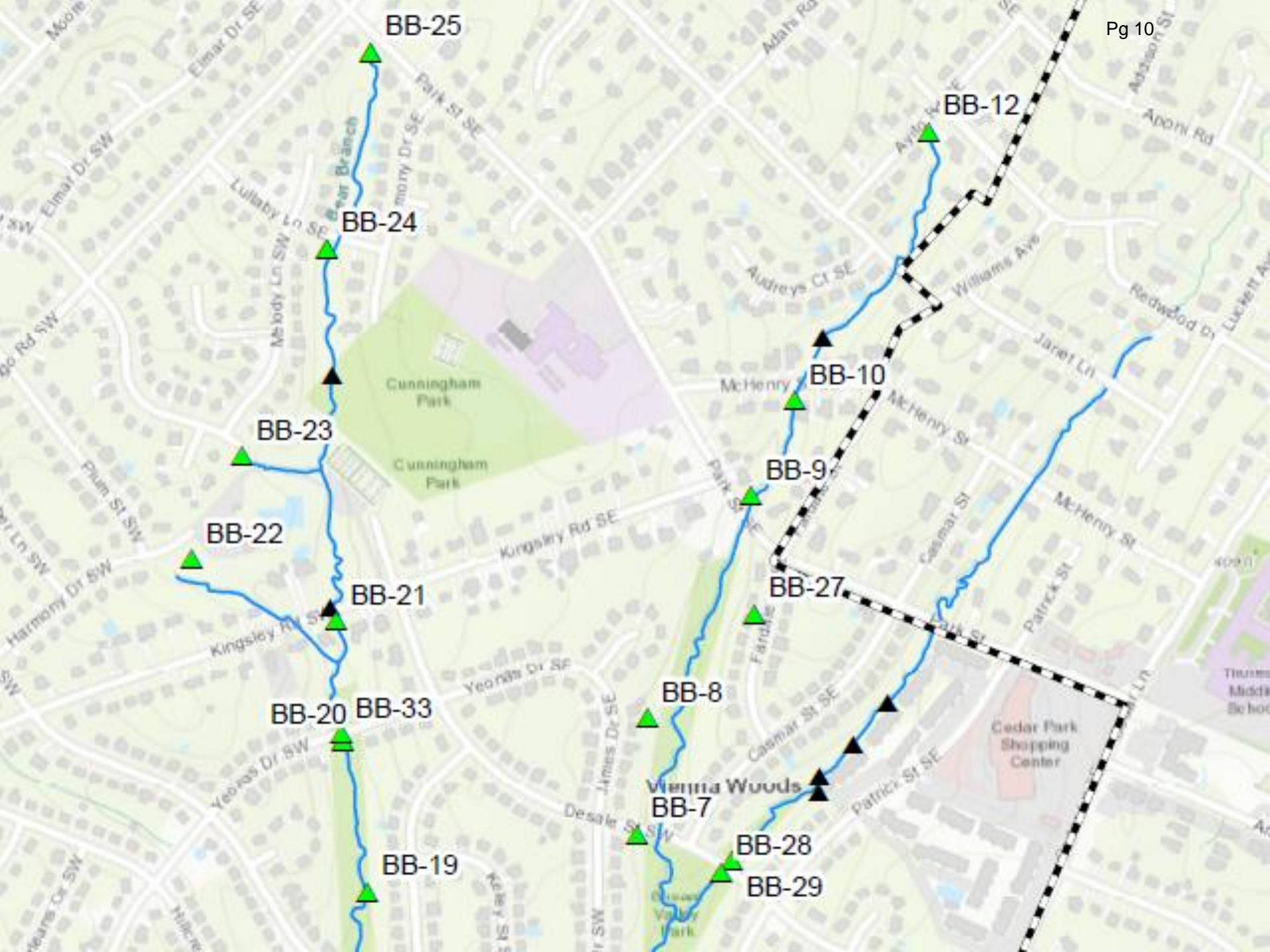


Northern Virginia Clean Water Partners
Annual Summary of Results
July 1, 2021 - June 30, 2022

- 35% of Fairfax County residents believe stormwater is treated by a wastewater facility or don't know
- 30% don't always pick up after their pets
- 81% could properly identify an illicit discharge; however, only 54% would definitely or probably report it
- 29% of people with lawns use recommended practices (test, fertilizer in the Fall, or do not fertilize)

Illicit Discharge Detection and Reporting

- The Town made significant improvements in mapping storm drain infrastructure
- 200 stormwater outfalls inspected for illicit discharges in past four years – 50 more scheduled for June
- 19 potential/actual illicit discharges investigated:
 - 6 cooking oil/food waste
 - 3 wash water/cleaners
 - 2 sediment
 - 2 petroleum from vehicles/power washing
 - 2 contractor materials (paint/concrete)
 - Other items (trash, dumpsters, etc.)



Stormwater Management Facilities

- Explosion of stormwater facilities – good for water quality, a challenge to manage
- 138 private facilities as of July 1, 2028
- Since 2018, have added 262 new private facilities!
- Vast majority are residential facilities
- Privately maintained, but Town is responsible for enforcing maintenance agreements

Good Housekeeping Practices

Training for Town Employees

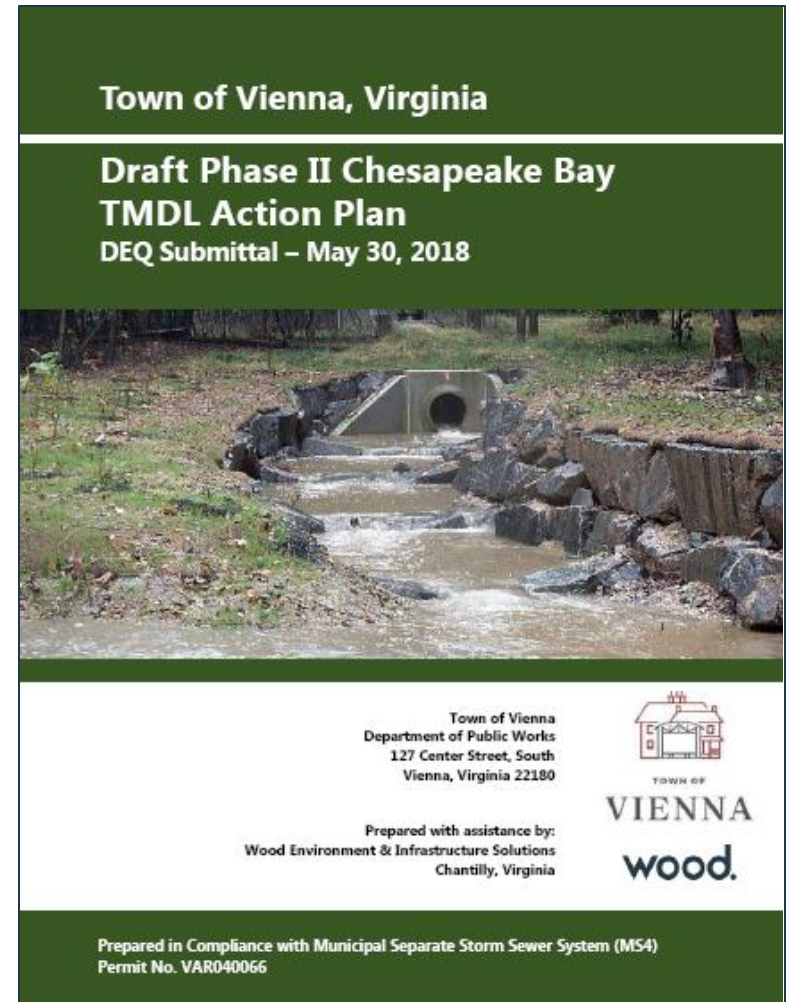
- Pollution prevention training two times
- Illicit discharge detection and reporting training three times
- Police response training to occur in June

Pollution Prevention Plans

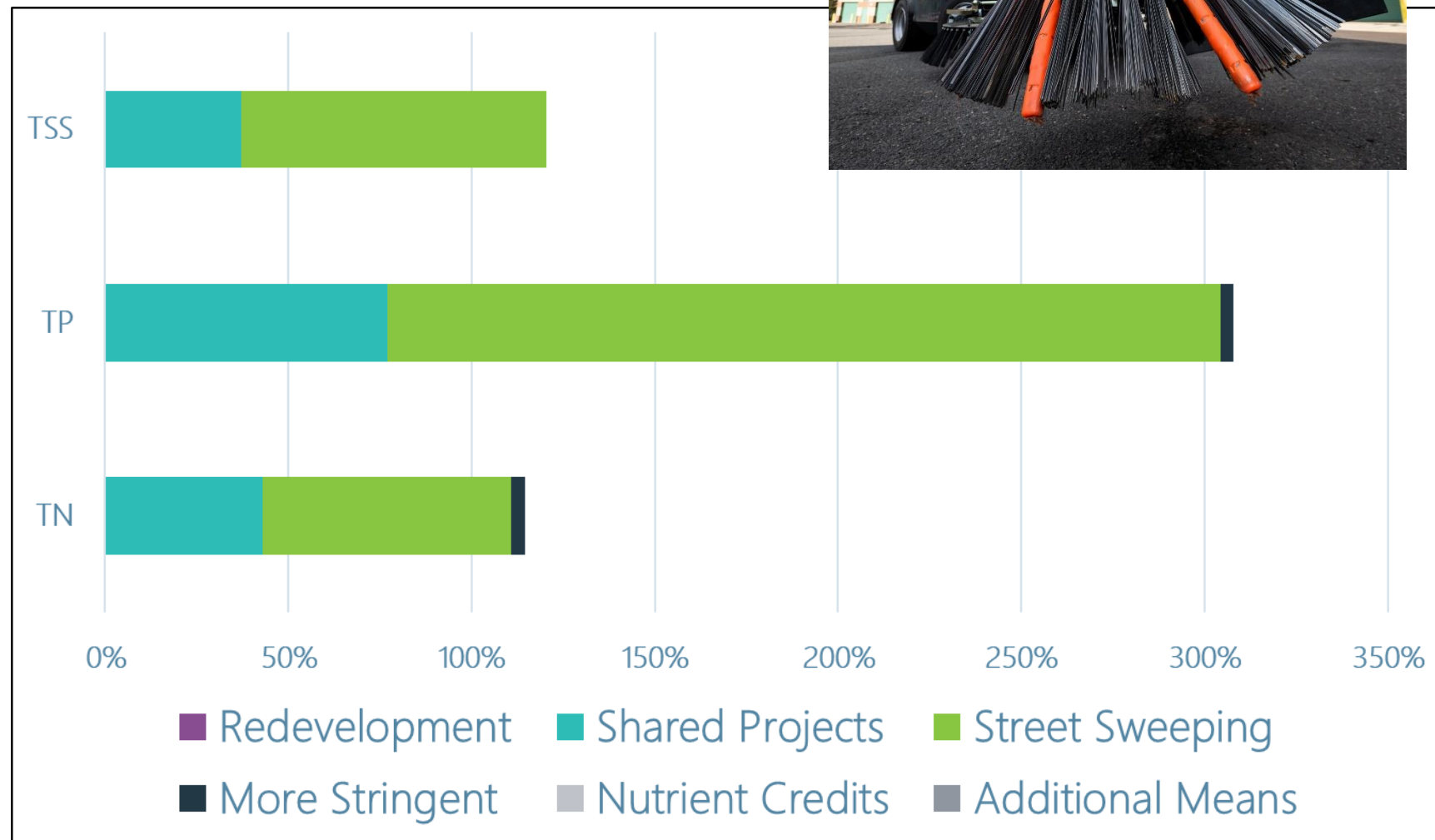
- Updated Northside Property Yard Stormwater Pollution Prevention Plan (SWPPP)
- New Nutley Street Maintenance Yard SWPPP
- Both sites inspected semi-annually

Chesapeake Bay TMDL Action Plan

- Successfully implemented Phase II requirement to meet 40% of pollutant reduction targets
- Indeed, draft Phase II plan showed 100% targets were already met using street sweeping!

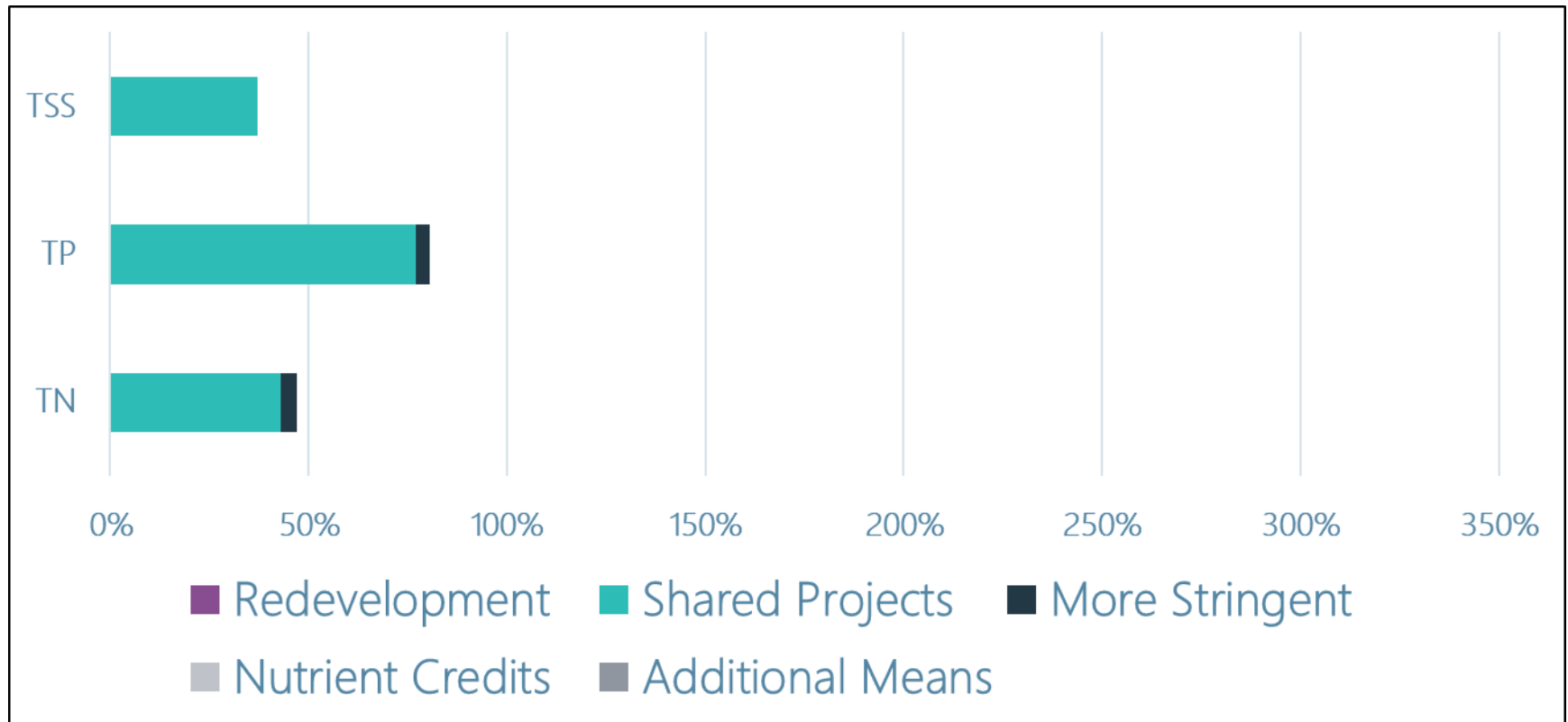


Go Street Sweeper!



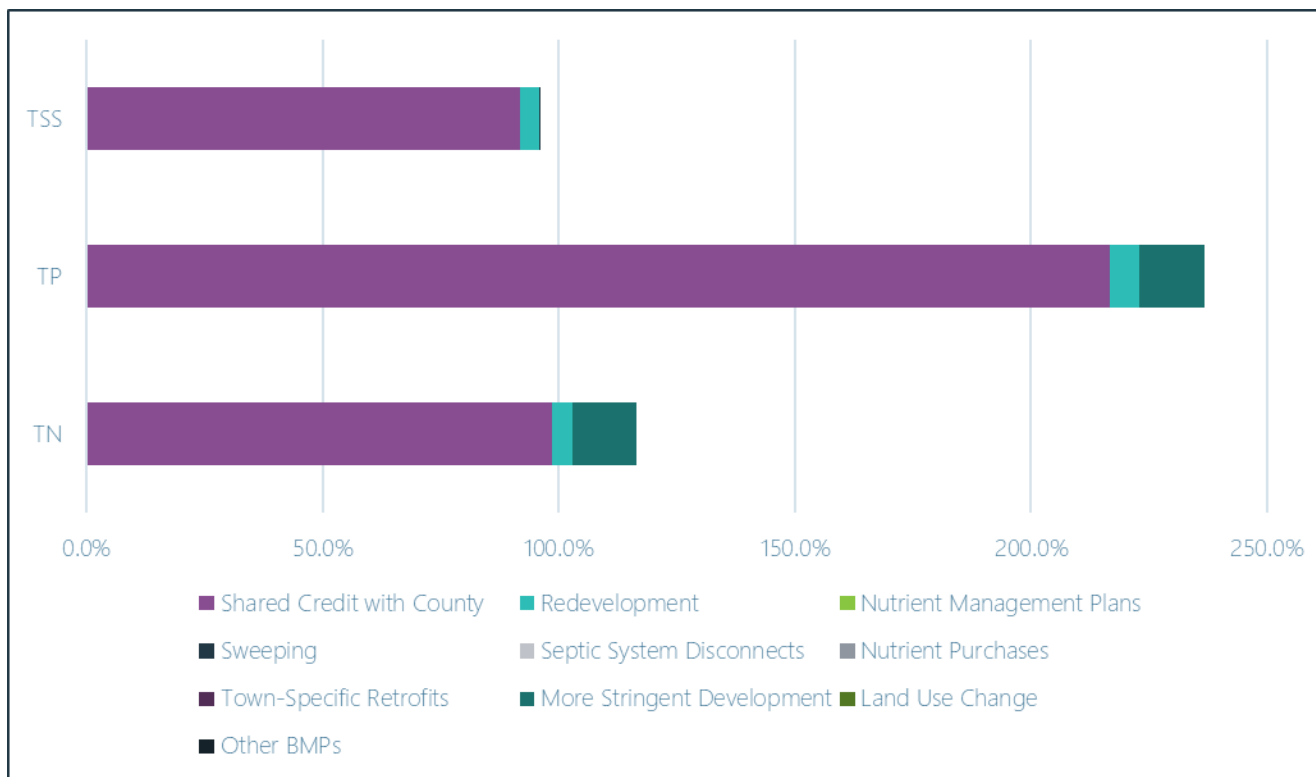
A Step Back... The Rules Change

DEQ guidance on street sweeping changes... dramatically.



A Giant Leap Forward

Partnership with Fairfax County and the Town of Herndon puts Vienna on track.



Stream Restoration Projects

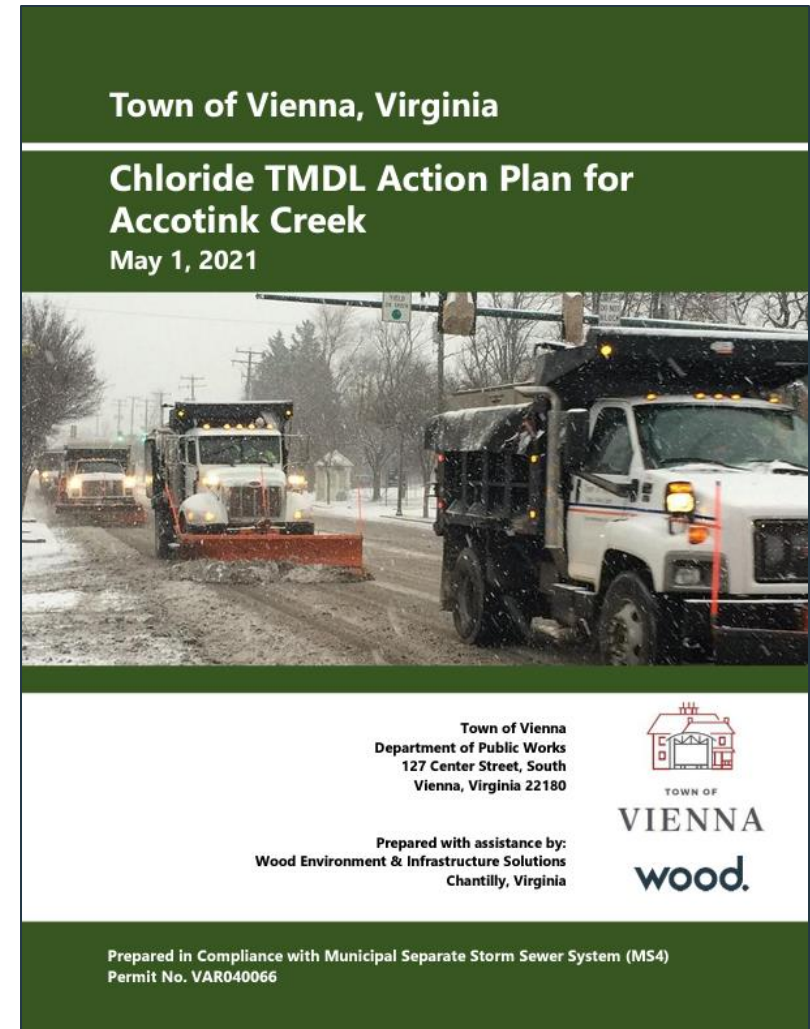


Stream restorations like Piney Branch were a part of the partnership with Fairfax County.

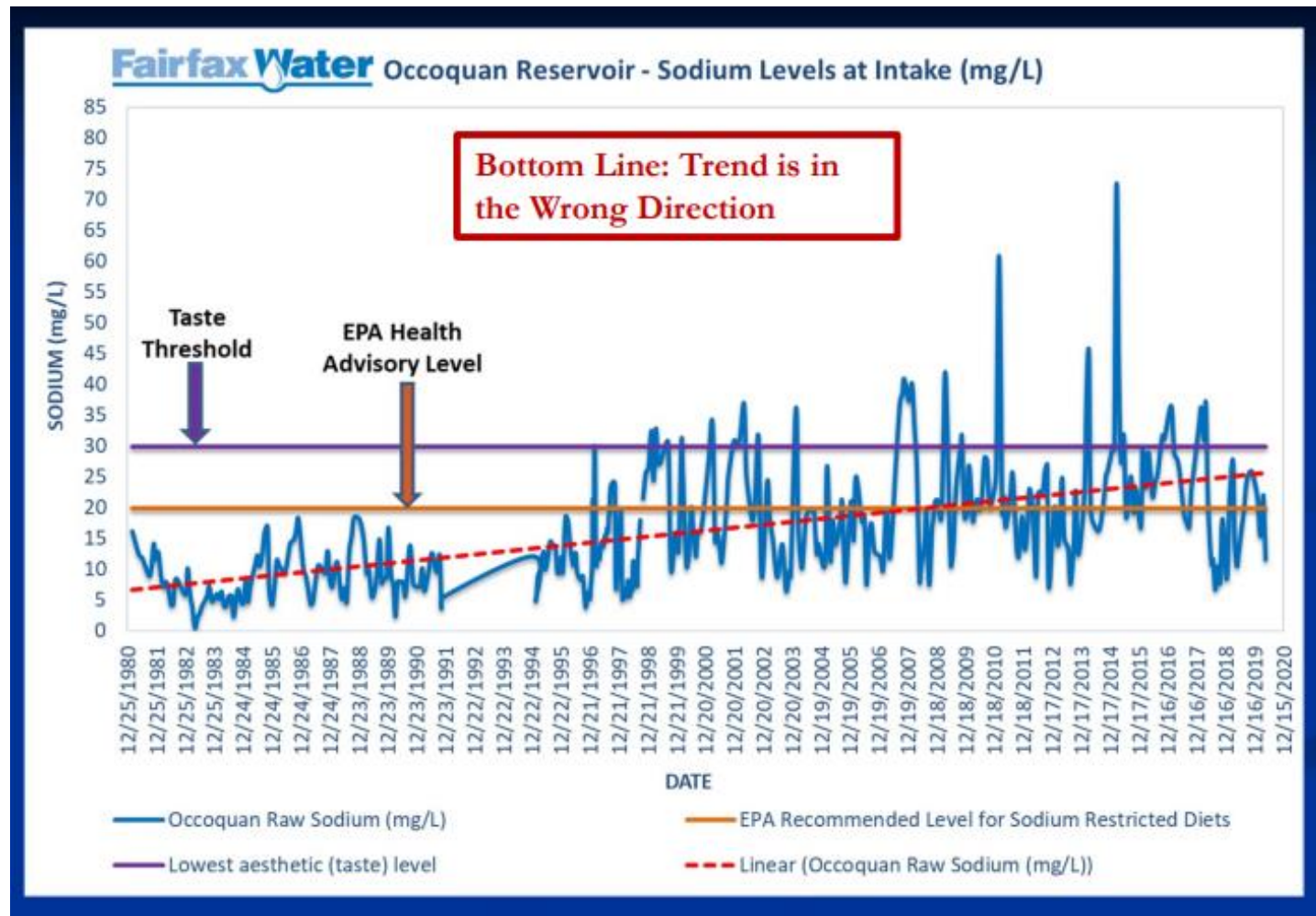
Local Water Quality Issues

Local TMDL Action Plans

- Sediment for Accotink Creek and Difficult Run
- Bacteria for Accotink Creek and Difficult Run
- PCBs for Potomac River (Accotink Creek)
- Chloride (Salt) for Accotink Creek



Challenge of Chloride



2021 DEQ Audit



Post the MS4 annual report for each year of permit term to the Town's website



Dry weather screening protocols need to track time for last precipitation event



BMP database needs to indicate whether BMPs are used for TMDL credit



Implement BMPs for brine salt storage tanks at property yard

Brine Storage Area



New Permit Focus Areas

- More flexibility for outreach strategies; focus on adaptive strategies
- Require more detail for mapping requirements. Vienna already meets these
- Must report the physical condition of outfalls
- **Better tracking and accountability for maintenance of public stormwater facilities**
- New standard operating procedures for deicing, exterior building maintenance, utility construction discharges, and landscaping materials
- Update SWPPPs and TMDL action plans

New Permit Schedule

Item	Timeframe
Registration Statement and Draft Phase III Bay Action Plan	October 1, 2023
Updated MS4 Program Plan	May 1, 2024
Final Phase III Bay Action Plan	November 1, 2024
Update Local TMDL Action Plans	May 1, 2025
Deicing/Anti-icing SOP	November 1, 2025
Building Washing SOP	November 1, 2026
Stream Maintenance and Inspection SOP	November 1, 2026
Other SOPs (Construction and Landscape Materials)	TBD
Update SWPPPs and Other TMDL Plans	TBD

VESC and VSMP Consolidation

- Consolidated Erosion and Sediment Control and Stormwater Management Regulation to go before the State Water Control Board this June
- No significant changes in technical criteria. Focused on:
 - Streamlining process
 - Clarifying requirements
 - Eliminating redundancies
 - Correcting inconsistencies
- But... there will be significant organizational changes
- Vienna will have until July 1, 2024 to adopt amendments
- Presents an opportunity to make any other changes to the Town's ordinances

Thank You! Questions?

