

The Silver Spring Downtown & Adjacent Communities Plan

TREE CANOPY FACT SHEET



Downtown Silver Spring has only an 8% tree canopy cover. This is unhealthy. We need a 45%* tree canopy to make Silver Spring healthy, liveable, lovable, and a climate resilient community.

Downtown is full of impervious surfaces: concrete, buildings, roads, pavement. These significantly contribute to the failed water quality of Rock Creek, Sligo Creek, the Anacostia River, and the Chesapeake Bay.

*Goetz et al. (2003). Tree Canopy Report, 2011

Silver Spring lacks shade. Our streets should all be all shade in the heat of summer. This plan **MUST** require the preservation and protection of the existing tree canopy, and **MUST** require 45% Tree Canopy and 35% Green Cover. **Make Silver Spring GREEN, not GRAY.**



A 45% TREE CANOPY Goal and Action Plan will help improve water quality in Sligo Creek and Rock Creek

What is Tree Canopy?

Tree canopy (TC) is the layer of leaves, branches, and stems of trees that cover the ground when viewed from above. MoCo's tree canopy is a vital asset that reduces storm water runoff, improves air quality, reduces the county's carbon footprint, enhances quality of life, contributes to savings on energy bills, and serves as habitat for wildlife.

We must protect the few remaining large, beneficial, mature trees that are over 18" in caiiber, they*:

- store 1,809% more carbon than a smaller tree
- sequester 345% more carbon
- absorb 180% more storm water runoff
- remove more pollution per ounce by 174%
- maximize wildlife habitat, food, and biodiversity

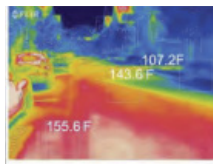
*SSDAC, Appendix E-Environment.



TREE CANOPY is good for business and the economy. Canopy trees increase foot traffic, people show up, sales go up.

EXTREME HEAT ALERT

Extreme Heat is the #1 climate hazard. Silver Spring is really HOT!



Atmosphere Temp: 87°F
Date: July 21, 2020

In Sun: 155.8°F
In Shade: 111.5°F
Sun/Shade Difference: 44.3°F

Silver Spring in summer generates extreme surface temperatures*, causing the heat island effect.

*SSDAC, Appendix E-Environment.

Urban Core: Surface Temperatures*

- Sun Temp: 130 to 155.8 degrees
- Shade Temp: 90.9 to 116.3 degrees

Adjacent Communities

- Sun Temp: 121 to 136.9 degrees
- Shade Temp: 87.9 to 118 degrees

Lack of TREE CANOPY is a prime contributor to extreme heat. This is an economic issue, an equity issue, a public health and well-being issue.

ACTION needed by Council Make the Change

Change the existing '35% Green Cover' language

from 'encourage' and 'optional' to '**MUST**' and '**REQUIRE**' in the CR Zones

- Green Cover is: 1) a green root 2) vegetation, or 3) tree canopy cover **on private property (not on public streets)**
- 35% Green Cover **MUST** be required on each lot throughout the entire Plan area; in all places, not some places.

Bethesda's 2017 Plan requires Green Cover. Why is it not required in Silver Spring? How is this equitable?

ACTION needed by Council Make the Change

Preserve and protect & add to the existing tree canopy on both private land and public streets.

- Require all existing large mature Canopy Trees to be preserved and protected in CR & Residential Zones.
- Do not provide exemptions or waivers for Canopy trees to be cut down.
- **REQUIRE** lots in Residential-only Zones, in all Adjacent Communities, to meet a 45% tree canopy requirement on-site.

Plant shade trees to grow into canopy trees; small decorative trees do not provide the same form and function.

ACTION!

The Climate Action Plan (CAP) seeks to cut greenhouse gas emissions 80% by 2027 -- in just 5 years!

and 100% by 2035. To meet the CAP goals this Sector Plan **MUST REQUIRE** 35% Green Cover, Tree Canopy, and most importantly -- **MUST REQUIRE** the preservation and protection of existing tree canopy. The **M-NCPPC mission** is not only to "manage physical growth and plan communities," but also to "**protect and steward natural resources.**" **MCDOT and SHA** **MUST** also meet street tree requirements and assign funding to implement it. **These agencies MUST work in unison.**

ACT IN UNISON

Environmental experts **MUST** be put in the lead, must be given the authority to make the decisions and implement these **ACTIONS**. The Executive, County Council, and the Planning Board **MUST ACT NOW** to reduce greenhouse emissions to achieve climate resiliency.

The Silver Spring Downtown & Adjacent Communities Plan



What you need to know

The Silver Spring Downtown and Adjacent Communities Plan...

1. Fails to live up to its identify, its brand, its name, its source: Silver Spring
2. Fails to add enough nature for the mental health & well-being of the citizens who live and work here
3. Fails to protect, preserve, prioritize or grow Tree Canopy to lower the extreme heat island effect
4. Fails to strategically meet Climate Action Plans
5. Fails to consistently distribute tree canopy equally throughout the entire plan

Remove these WORDS they do not meet Climate Action Plans: "Recommend" "Encourage" "Consider" "Optional"

Additional ACTIONS needed by Council

COUNCIL MUST add these words too:

- REQUIRE a specific percent of the 35% Green Cover on private property to be Tree Canopy at street level
- SPECIFY 'opportunities' on a map showing where tree canopy and infrastructure MUST be added
- REQUIRE tree types listed on the "MCDOT Major Tree List"
- DEFINE Street Tree Planting Standards: Plant major trees 30 feet on center
- DEFINE Soil Volumes needed for 'tree pits' to plant Major Trees (1,000 cubic feet)
- DO NOT ALLOW buildings to 'build to the property line', require they leave enough private land for tree canopy and safe sitting places that offer respite from street level HEAT.
- REQUIRE street storm water management in the public rights of ways to have permanent MCDOT Major Trees (not small or minor temporary trees)
- REQUIRE every surface parking lot to have shade trees: a 45% tree canopy planted on the edges and in between spaces

Environmental Equity & Health

ALERT

Equity and the Natural Environment are the defining issues of our times. *SSDAC, Appendix E-Environment.

**The effects of climate and environmental inequity are often most acutely felt in lower income, elderly, and minority communities. Historically these communities are known to have distant or inaccessible parks and open space for rejuvenation and recreation, less shade trees and vegetation, poorer quality housing and insulation, lower energy efficiencies, and more. These conditions create chronic physical and economic stress, can cause elevated utility costs, and diseases such as heat stroke, respiratory and heart conditions, allergies, and bronchial infections.*

Take the ACTIONS we recommend to help us reach greater equity.

Silver Spring, 20910, is the most ethnically, racially, and economically diverse area of Montgomery County.

Bottom Line for citizens and politicians to know:

1. This Plan encourages street trees, but MUST it REQUIRE THEM on all streets. However street trees on ROWs may be removed by Pepco, SHA, and MCDOT. Street trees can be cut down or taken down, not cared for, or removed for many reasons.
2. **There are no effective requirements nor regulations to protect any large, medium, or small trees in Silver Spring.** During any redevelopment or rezoning process trees will most likely be removed. Current tree laws are wholly insufficient, and many exceptions and waivers are granted. The laws need to be strengthened.
 - a) **The Forest Conservation Law (FCL) is mostly for very large tracts of land over one acre or 40,000 sqft and greater.** The majority of Silver Spring properties are smaller and the law will not apply. Off-site planting provisions will not benefit this community, they are not equitable.
 - b) **The Tree Canopy Law** is applied only if 5,000 sqft of soil is disturbed, then a 'Sediment Control Permit' is required. Adjacent Community lots are anywhere from 5,000 to 10,000 sqft. property owners can still cut down trees and pay a fee into a tree mitigation fund that has the option to plants trees outside the area, or not on the site. Tree Canopy is not required to be protected or preserved.
 - c) **Our County has NO effective law** to preserve or protect existing large trees on private and public property (with the exception of some champion trees.) We need effective tree protection laws and regulations to stop the removal of large canopy trees in developed urbanized/suburban areas. **NYC, DC, Philly have these laws, why not MoCo?**
3. This is an equity issue: Silver Spring is much more diverse, and less wealthy than Bethesda. MORE should be required. For example the Bethesda Plan requires a 600 cubic feet of soil in a tree pit, and it specifies where tree 'opportunity locations exist' The Silver Spring Plan does neither.
4. "The Cool Streets" document MUST REQUIRE Tree Canopy AND preserve and protected existing Canopy Trees.
5. Trees are not all equals: only large trees provide **significant** carbon reducing benefits,
6. 'Green Cover' does not require tree canopy be planted.

SOURCES/REFERENCES

Silver Spring Plan, <https://montgomeryplanning.org/planning/communities/downcounty/silver-spring/silver-spring-downtown-plan/>
 Silver Spring Plan, Appendix E - Environment, <https://montgomeryplanning.org/wp-content/uploads/2022/01/SSDAC-Appendix-E-Environment.pdf>
 Tree Laws 101: https://drive.google.com/file/d/17E9za_Q4MmUiPhfKKRODTgYhxlz1UPEn/view
 Tree Canopy Report, 2011, https://www.fs.fed.us/nrs/utc/reports/UTC_Report_MontgomeryCounty.pdf
 Bethesda Master Plan 2017 https://montgomeryplanning.org/wp-content/uploads/2017/09/BDP-COUNCIL-ADOPTED-MAY2017_SMALL-FOR-WEB.pdf
 Climate Action Plan, 2022 <https://www.montgomerycountymd.gov/green/climate/index.html>