Arlington Tree Action Group
Advocating for Trees in Arlington

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For Immediate Release

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ATAG Challenges County's Misleading Claims on Tree Canopy Study

Arlington, Virginia – April 12, 2018 - Arlington County is using an arsenal of its public outreach resources to present an overly optimistic picture of the health of the forest resources based on a 2017 tree canopy study according to the Arlington Tree Action Group (ATAG). The study concluded that the tree canopy increased by 1% between 2011 and 2016 but the County media push fails to emphasize a decrease from the 43% recorded in 2008. More alarming for 10 civic association neighborhoods is the scant recognition of the actual loss of more than 5% of their trees over just five years, with another 14 neighborhoods losing up to 5%. The County has instead declared that the trees are "on the rebound" based on the report.

After reviewing the report, Jarlath O'Neil-Dunne, Director, Spatial Analysis Laboratory, Rubenstein School of Environment and Natural Resources, the University of Vermont, concluded that the accuracy of the data used was only 94% making the findings publicized by the County highly questionable. In keeping with the County initiative for more open data, ATAG is concerned that the information disseminated must be accurate.

The 2004 Arlington County Urban Forest Master Plan called for an increase in the tree canopy from the estimated 41% at that time. The Plan also called for extensive programs for the preservation and planting of trees. Arlington County does not have an inventory of the trees on public lands that many jurisdictions such as the District have established. The County currently has capital projects including stream restorations, community centers, and park developments, that will remove hundreds more trees in the next few years, dwarfing the public and private tree planting programs underway.

ATAG is concerned that the County outreach mischaracterizes the study results which could delay addressing serious environmental, health and economic challenges accompanying urban tree canopy loss. The outreach has included presentations to the County Board, the Urban Forestry Commission and other County commissions and civic associations, as well as articles in "The Citizen" newsletter to all residents, pages on the County website, and posters in parks.

ATAG is a group of concerned Arlington citizens working to preserve the sustainable urban forest, promote green infrastructure, and protect the environmental ambience that makes the community economically attractive. Working with individuals and established community organizations, the group seeks to highlight important issues facing Arlington's urban forest and bring together resources to maximize their goals.

See https://arlingtontreeactiongroup.org/news/ for a more complete discussion and links to relevant documents.

Arlington Tree Action Group

The Arlington Tree Action Group (ATAG) is citizens working to preserve and grow Arlington, Virginia's urban forest to keep Arlington green and fulfill the Vision stated in the County's Urban Forest Master Plan (2004).

We monitor what changes are happening in Arlington and how they affect permeable land and tree growth. We will give you a heads up when an email will be effective. It is environmentally dangerous to pave and manicure too much of any city. Please be a part of keeping Arlington green and environmentally sound for generations! ATAG aims to:

§ Preserve sustainable urban forest that contributes to the livability of our community.
§ Promote green infrastructure that provides economic and environmental benefits.
§ Protect the charm of our community for generations.

Arlington Urban Forest Master Plan Vision: "Arlington County will strive to have a sustainable urban forest that contributes to the livability of our urban community. Our trees are recognized as part of our green infrastructure that provides economic and environmental benefits. The current trend of tree canopy loss will be slowed and efforts made to reverse this trend through best practices in tree planting, preservation, and maintenance while fostering a sense of stewardship among residents."

The ATAG web site offers resources, voices of other residents concerned about tree loss, innovative tree programs in other jurisdictions that can be good models, and news at http://arlingtontreeactiongroup.org/.

Correspondence with the Arlington County Manager:

From: Arlington Tree Action Group [mailto:arlingtontreeactiongroup@gmail.com]
Sent: Thursday, April 05, 2018 8:27 AM
To: Mark Schwartz <Mschwartz@arlingtonva.us>
Cc: CountyBoard <CountyBoard@arlingtonva.us>; Jane Rudolph <Jrudolph@arlingtonva.us>; Jennifer Fioretti <Jfioretti@arlingtonva.us>; Bryna Helfer <bhelfer@arlingtonva.us>; Robert Sharpe <Rsharpe@arlingtonva.us>; norapalm@verizon.net
Subject: Letter to County Manager regarding misleading claim about tree canopy

Dear Mr. Schwartz,

On behalf of the growing movement of citizens in Arlington who are troubled by the loss of trees in our neighborhoods, we are writing to express concern about the County's presentation of the Davey Resource Group December 2017 Urban Tree Canopy Assessment.

The County, at https://environment.arlingt onva.us/trees/tree-canopy/ and in presentations to the County Board, the Arlington Urban Forestry Commission, and others, is claiming Arlington's overall tree canopy increased 1% since 2011. In the March-April "The Citizen" the tree canopy in Arlington is pronounced to be "on the Rebound" (page 5).

The Assessment does, indeed, state that the County's tree canopy stood at 41% in 2016, compared to 40% in 2011 and 43% in 2008 (page 6). However, Appendix A, Methodology and Accuracy Assessment, beginning at page 27 of the Assessment,makes it clear that, despite Davey's best efforts, the Assessment's results are not comparable due to the different methodologies and data sets used. Further, the County's claim of a 1% increase in tree canopy is within the 2% margin of error, so this could actually be a 1% decrease.

Jarlath O'Neil-Dunne, Director, Spatial Analysis Laboratory, Rubenstein School of Environment and Natural Resources, The University of Vermont, examined Arlington's December 2017 Assessment and concludes in the attached letter:

 "Estimating tree canopy change over time from remotely sensed data (imagery and LiDAR) requires that the amount of change fall outside of the margin of error. For example, if the two tree canopy estimates, produced at differing times have a margin of error of +/- 2%, one cannot conclude that there is a 2% increase. The accuracy of the mapped tree canopy data in Arlington's latest tree canopy assessment is approximately 94%. This accuracy [is] too low to draw conclusions about changes in tree canopy. Furthermore, comparisons to the previous study, which used different source data and differing methods, are problematic.

Meanwhile, the real headline story from the Assessment is that some Arlington neighborhoods are suffering severe tree canopy losses. From 2011 to 2016 ten civic association neighborhoods lost more than 5% of their tree canopy, while another dozen lost up to 5% of their tree canopy (Assessment, page 10).

The County's interpretation of the Assessment could contribute to an unwarranted public perception that the tree canopy is adequate and healthy, rather than still needing the improvements recommended in the 2004 Urban Forest Master Plan.

We request the County refrain from claiming that Arlington's tree canopy has increased 1%. We further request that previous County statements to that effect be corrected (e.g., by noting that the 1% number in the Assessment is within the margin of error). In the presentation staff makes on the report, the slide with the claims of "1% increase in tree canopy since 2011 study" and "Increase due to growth and planting" should be removed.

 We would like to meet with you to discuss this further, and look forward to your thoughts on how to correct the record and identify a process to ensure more accurate information is provided going forward in future planning and reporting the results of tree canopy studies.

We are pleased that the County will be embarking on an update of the Urban Forest Master Plan later this year and hope it will proceed expeditiously. Arlington Tree Action Group (ATAG) will actively participate, and encourage other organizations and individuals as well, to join in the community engagement and planning to provide any assistance possible for these important initiatives.

We look forward to hearing from you soon.

Natasha Atkins
Margie Bell
Angela Dickey
Mary Glass
Kit Norland
Bill Roos

For Arlington Tree Action Group (ATAG)

Response:

The County Manager's office has not been able to schedule a meeting to discuss this issue until June 7th but continues to distribute information.

March 27, 2018

I have been asked to give my expert opinion on how the suitability of the latest tree canopy assessment for the purposes of tracking tree canopy change for the City of Arlington, Virginia. Estimating tree canopy change over time from remotely sensed data (imagery and LiDAR) requires that the amount of change fall outside of the margin of error. For example, if the two tree canopy estimates, produced at differing times have a margin of error of +/- 2%, one cannot conclude that there is a 2% increase. The accuracy of the mapped tree canopy data in Arlington's latest tree canopy assessment is approximately 94%. This accuracy too low to draw conclusions about changes in tree canopy. Furthermore, comparisons to the previous study, which used different source data and differing methods, are problematic.

The imagery used for the latest Arlington tree canopy assessment came from the National Agricultural Imagery Program (NAIP). NAIP is a desirable dataset to use for tree canopy mapping because it is leaf-on and high-resolution, with a pixel size of 1-meter. One of the chief limitations associate with NAIP is its positional accuracy. Tall features in NAIP have lean associated with them, making it difficult to determine if changes in tree canopy from one time period to the next are due to actual gains and losses, or these positional difference.

While there is no perfect way to map tree canopy change, my recommendation is that the City of Arlington follow the US Forest Service's approach to tree canopy change, which is currently being used by Fairfax County. This approach to tree canopy change analysis involves mapping change at the tree canopy scale in three classes: gains, loss, and no change. This methodology minimizes error and maximizes the ability to draw conclusions about the actual change in tree canopy from one time period to the next.

Sincerely,

Jarlath O'Neil-Dunne
Director, Spatial Analysis Laboratory