Abington Shade Tree Commission

Meeting Agenda and Supporting Slides

MAY 20, 2020

MEETING AGENDA

May 20, 2020

*Topics for Discussion

ADVISORY AND ADMINISTRATIVE

ZOOM MEETING PROTOCOLS

ANNUAL REPORT
Recorded presentation submitted to Board of Commissioners
*2020-2021 priorities

ADVISORY
Hazard tree removal near 2169 Woodland Avenue, site visit
LD-19-01, Duke Real Estate Partners, site visit
AWS Regenerative Stormwater Conveyance (RSWC), site visit
*Inquiry about vegetative clearing on private property

ZONING ORDINANCE
Proposal to revise Landscaping Article included in Annual Report
*Proposal- stand-alone recorded presentation

MASTER TREE PLAN
Recorded presentation of preliminary results
Street Tree inventory completed- awaiting analysis
* Davey Assessment of Urban Forestry

FINANCIAL
Current balances
Donations can be made through paypal.me/AbingtonTrees

STEWARDSHIP

ARBOR DAY
Video of planting 2 trees at Grove Park

ARDSLEY WILDLIFE SANCTUARY
Recorded presentation covering Phases 1 and 2
Phase 2 grant application approved and submitted
Walk in Penn's Woods - October 3, 2020 (may be individual or virtual)

BOY SCOUT GAME PRESERVE
*Funding opportunity- 2022 DCNR Grant
*Proposal- fall/ winter planting

TREE TENDING IN PARKS
Friends of Parks tree tending, at Grove, Hallowell, and Roychester
*Proposal-replace dead trees, guided by Parks Tree Inventory

TREES AT HOME
*Proposal- series of video recordings to be promoted through the Township website
*Proposal- Fall Tree give-away in lieu of public planting events

Annual Report

2020 - 2021 Priorities

- **Planning.** Complete the Master Tree Plan in coordination with other Township planning (Comprehensive, Stormwater, and Parks)

- **Standards.** Advocate revisions to the Township Code to address tree preservation, protection and replacement.

- **Stewardship.** Continue forest restoration at the Ardsley Wildlife Sanctuary and the Boy Scout Game Preserve. Plant and establish trees in parks. Add tree inventories and maintenance features to the Township GIS system.

- **Outreach.** Host a variety of tree planting events in fall-winter 2020, structured to replace lost canopy and to teach residents how to plant and care for trees.

- **Engagement.** Grow the Friends of Parks groups and equip them with basic tree care knowledge. Encourage Residents to preserve and replace trees, and to participate in management of the Spotted Lantern Fly.

- **Funding.** Proactively apply for grants and grow donor support for our trees.

Advisory: Desirability of Retaining, Altering or Replacing Shade Trees on Private Property

§ 42-2. Powers and duties.

The Shade Tree Commission shall have the following powers and shall be required to:

- Work with the appropriate township officials charged with the enforcement of the Zoning Ordinance and the Subdivision Ordinance of the township[1] regarding shade trees to help implement the provisions of those ordinances with respect to:
  (1) The planting, removal, maintenance and protection of shade trees in the public streets and highways of the township.
  (2) The establishment and maintenance of buffer zones.
  (3) The planting of shade trees in developments.

- Contact owners of private property, where there is the possibility of shade trees being removed, to advise them of the desirability of retaining, altering or replacing such trees.

- Work with other township officials and provide information to the public in order to encourage the planting and maintenance of shade trees on private property.

- Prepare and present to the Board of Commissioners such additional legislation as the Commission deems appropriate to promote the planting and maintenance of shade trees in the township.

Of Concern:

Removal of shade trees not covered by Township Code

Proposal:

1. STC to be alerted by Township staff or residents when there is the possibility of shade trees being removed

2. STC contact property owners to advise of the desirability of retaining, altering or replacing such trees

3. STC create an informational presentation and handout to support this outreach

Zoning Ordinance: Practical Standards

Tree Preservation , Protection and Replacement

Focus on the Landscaping Article of the Abington Township Zoning Ordinance

- Address critical gaps in tree protection, tree preservation and tree replacement
- Address inconsistencies in the current Article
- Refine the entire Article for practicality, effectiveness and ease-of-use

Applicability

- Site disturbance
- Exceptions for single family residence below disturbance threshold

Tree Survey Plan

- Show existing and proposed landscape plan, showing trees to be preserved and those to be removed, tree protection zones and tree replacement schedule

Standards

Flexibility

- Tree preservation, protection and maintenance
- Tree replacement and allowable substitutions

Roles and Responsibilities

Funded by the PA Tree Vitalize Community Forestry Management Program.
Peer reviewed at the state level and now adopted by multiple municipalities.

Professional services: Municipal Arborists experienced with Municipal Tree Ordinances

Tree Canopy Assessment

Preliminary Conclusions

While 42% canopy sounds like a lot of trees,
we are losing these trees at an alarming rate.

- Between 2004 and 2017 we lost approximately 1 out of 8 trees.
- This trend will continue unless we systematically preserve and protect existing trees, and plant replacement trees.

The 6% canopy loss represents an ongoing annual loss of $263,000 per year in these ecosystem services:

- Carbon sequestration
- Clean air
- Stormwater runoff

In order to restore these essential ecosystem services,
we need to increase tree canopy on both public and private lands.

As a community, we can do this!

Master Tree Plan

Preserve, Grow and Manage Abington's Urban Forest

Establish base line measures of the current state and changes of the canopy

- UTC & iTree-ECO valuation
- Selected inventories including street trees and parks
- Benchmark relevant municipal tree plans

Next step

Identify Strengths, Opportunities, Weaknesses and Threats (SWOT)

- Examine our Strengths and Weaknesses via Davey Urban Forest Assessment Matrix
- Characterize the best Opportunities to reverse the trend in declining canopy, and to address equity, public health and watershed needs
- Characterize the most significant Threats to the canopy, including lack of awareness, development, climate change, invasive plants and pests

Create a Compelling Vision, guided by baseline measures, SWOT and stakeholder input.

Identify Key Strategies that together enable progress towards the vision.

Recommend Actions and Resources to address each strategy.

Funded by the PA Tree Vitalize Community Forestry Management Program

Professional services: Urban Forest Research, Strategic Planning

Assessment of Urban Forestry

Overview

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Red = Low
Yellow = Moderate
Green = Good

The Trees	Urban Tree Canopy		*Declining*
	Equitable Distribution		*7-fold range*
	Size/Age Distribution		*Older*
	Condition of Public Trees - Streets, Parks		*Poor*
	Condition of Public Trees - Natural Areas		*Not assessed*
	Trees on Private Property		*Basic UTC info*
	Species Diversity		*None>20%*
	Suitability (RIght Tree Right Place)		*50-75%*
The Players	Neighborhood Action		*Some groups*
	Large Private Landholder Involvement		*Unaware*
	Green Industry Involvement		*Low level*
	Township Cooperation		*Informal team*
	Funder Engagement		*Selected*
	Utility Engagement		*Coordination*
	Developer Engagement		*Awareness*
	Public Awareness		*Mixed*
	Regional Collaboration		*Shared goals*
The Mgmt Approach	Tree Inventory		*Partial*
	Canopy Assessment		*UTC 2017*
	Management Plan		*In progress*
	Risk Management Program		*Request-based*
	Maintenance of Publicly-Owned Trees		*Quality*
	Maintenance of Natural Areas		*Partial*
	Planting Program		*Limited scope*
	Tree Protection Policy		*Inadequate*
	City Staffing and Equipment		*No arborist*
	Funding		*Underfunded*
	Disaster Preparedness & Response		*?*
	Communications		*Channels*

Assessment of Urban Forestry

The Trees

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Indicators of a sustainable forest	Overall Objective of Industry Standard	Performance Levels			Abington Today	Next Steps	Priority (H, M, L)
		Low	Moderate	Good			
Urban Tree Canopy	Achieve the desired tree canopy cover according to goals set for the entire city and neighborhoods. Alternatively, achieve 75% of the total canopy possible for the entire city in each neighborhood	Canopy is decreasing and/ or no canopy goals have been set	Canopy is not dropping, but not on a trajectory to achieve the established goal	Canopy goal is achieved, or well on the way to achievement	Lost 6% cover 2004-2017, equivalent to losing on average 1 out of 8 trees	Set canopy goals	High
Location of Canopy (equitable distribution)	Achieve low variation between tree canopy and equity factors citywide by neighborhoods. Ensure that the benefits of tree canopy are available to all, especially for this most affected by these benefits	Tree planting and public outreach and educaton is not determined by tree canopy or benefits	Tree planting and public outreach and education is focused on neighborhoods with low canopy cover	Tree planting and public outreach and education is confused in neighborhoods with low tree canopy and a high need for tree benefits	Have done some pilot, eg TD Green Streets, but not systematic	Prioritize tree planting and public outreach based on census tract and watershed overlays	High
Age of trees (size and age distribution)	Establish a diverse-aged population of public trees across the entire city and for each neighborhood. Ideal standard 0-8" DBH 40%, 9-17" DBH 30%, 18-24" DBH 20%, over 24" DBH 10%	Age distribution is not proportionately distributed across size classes at the city level	Age distribution is evenly distributed at city level, though unevenly distributed at the neighborhood level	Age distribution is generally aligned with the ideal standard diameter classes at the neighborhood level	Street trees nearly uniform in age		
Condition of publicly-owned trees	Possess a detailed understanding of tree conditioning potential risk of all intensives-managed, publicly-owned trees. This information is used to direct maintenance actions	No current information is available on tree condition or risk	Information from a partial or sample of inventory is used to assess tree condition and risk	Information from a current, GIS-based, 100% complete public tree inventory is used to indicate tree condition or risk	Street tree inventory indicates most trees are fair to poor condition	Add street and park tree inventories to Township GIS system, and create a management system	High
Condition of publicly-owned natural areas	Possess a detailed understanding of the ecological structure and function of all publicly-owned natural areas (such as woodlands, ravines, stream corridors) as well as usage patterns	No current information is available on tree condition or risk	Publicly-owned natural areas are identified in a sample-based "natural areas" survey or similar data	Information from a current ,GIS-based survey is utilized to document ecological structure and function, as well as usage patterns	Natural area assessment has been done for AWS begun for BSGP, and lacking for other natural areas.	Conduct an inventory of recently planted parks trees and a general assessment of the quality of the woodlands	High
Trees on private property	Possess solid understanding of the extent, location and general conditions of trees on private lands	No data is available on private trees	Current tree canopy assessment reflects basic information (location) of both public and private canopy combined	Detailed information available on private trees, e.g. bottom-up sample-based assessment of trees	UTC analysis combined with change analysis	Extend UTC analysis to identify opportunities to partner with large property holders, e.g. schools	High
Diversity	Establish a genetically diverse population of publicly-owned trees across the entire city and for each neighborhood. Thee populates should be comprised of no more than 30% of any family, 20% of any genus, or 10% of any species	Fewer than five species dominate the entire tree population city-wide	No species represents more than 20% of the entire tree population citywide	No species represents more than 10% of the entire tree population citywide	Does Acer exceed 20%? What does this suggest given the arrival of SLF?		
Suitability	Establish a tree population suitable to the urban environment and adapted to the overall region. Suitable species are gaged by exposure to imminent threats, considering the "Right Tree Right Place" concept and invasive species	Less than 50% of trees are considered suitable for the site	50-75% of trees are considered suitable for the site	More than 75% of trees are considered suitable for site	This is a guess. How would we figure this out?		

Assessment of Urban Forestry

The Players

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Indicators of a sustainable forest	Overall Objective of Industry Standard	Performance Levels			Abington Today	Next Steps	Priority (H,M,L)
		Low	Moderate	Good			
Neighborhood action	Citizens understand, cooperate, and participate in urban forest management at the neighborhood level. Urban forestry is a neighborhood-scale issue	Little or no citizen involvement of neighborhood action	Some active groups are engaged in advancing urban forest activity, but with no unified set of goals or priorities	The majority of all neighborhoods are organized, connected, and working towards a unified set of goals and priorities	Strength- PHS Tree Tenders program. Turn out at selected tree planting events. Opportunity- Under the direction of the STC, Abington Tree Tenders group + Friends of Parks Groups. Offer routine volunteer opportunities, e.g. monthly.	Share UTC results, invite participation.	High
Large private and institutional landholder involvement	Large, private and institutional landholders embrace city-wide goals and objectives through targeted resource management plans	Large private landholders are unaware of issues and potential influence of the urban forest. No large private land management plans are currently in place	Educational materials and advice are available to large private landholders. Few large private landholders or institutions have management plans in place	Clear and concise goals are established for large private land holders through direct education and assistance programs. Key landholders and institutions have management plans in place.	Opportunity- ASD, Jefferson Hospital, PSU, Manor, etc. Who are Abington's largest private landholders?	Share UTC results and invite participation	High
Green industry involvement	The green industry works together to advance citywide urban forest goals and objectives. The city and its partners capitalize on local green industry expertise or innovation	Little or no involvement from green industry leaders to advance local urban forestry goals	Some partnerships are in place to advance local urban forestry goals, but more often for the short term	Long-term committed partnerships are working to advance local urban forestry goals.	Have we even identified green industry partners? Could this include PECO? CSX? Landscapers? Tree Companies?	Identify green industry partners	
City department and agency cooperation	All city departments and agencies cooperate to advance city-wide urban forestry goals and objectives	Conflicting goals and/or actions among city departments and agencies	Informal teams among departments and agencies are communicating and implementing common goals on a project-specific basis	Common goals and collaboration across all departments and agencies. City policy and actions are implemented by formal interdepartmental and interagency working teams on all city projects	Active participation by Parks, Public Works, Engineering and Code Enforcement. STC now formally participates in LD applications.	Systematically capture how decisions are made about trees and address gaps in tree preservation, protection and replacement.	High
Funder engagement	Local funders are engaged and invested in urban forestry initiatives. Funding is adequate to implement city-wide urban forest management plan.	Little or no funders are engaged in urban forestry initiatives	Funders are engaged in urban forestry initiatives at minimal levels for short-term projects.	Multiple funders are fully engaged and active in urban forestry initiatives for short-term projects and long-term goals	Active support and participation - DCNR, Inframark, LLC, and TD Bank. STC strength in grant writing and administration.	Develop financial goals based on strategic priorities, and identify potential funders.	
Utility engagement	All utilities are aware of and vested in the urban forest and cooperate to advance city-wide urban forest goals and objectives	Utilities and city agencies act independently of urban forest efforts. No coordination exists.	Utilities and city agencies have engaged in dialog about urban forestry efforts with respect to capital improvement and infrastructure projects	Utilities, city agencies and other stakeholders integrate and collaborate on all urban forestry efforts, including planning, site work and outreach/ education	PECO, Asplundh relationships with Township.	Share UTC results and invite participation.	High
Developer engagement	The development community is aware of and vested in the urban forest and cooperates to advance citywide urban forest goals and objectives	Little or no cooperation from developers in (or awareness of) municipality-wide urban forest goals and objectives	Some cooperation from developers and general awareness and acceptance of municipality-wide goals and objectives	Specific collaborative arrangements across development community in support of municipality -wide goals and objectives	Currently enter into developer discussion as part of LD reviews. Proposal for Economic Development Corporation.	Partner with Economic Development Corporation to share UTC results and invite participation.	High
Public Awareness	The general public understands the benefits of trees and advocates for the role and importance of urban forests	Trees are generally seen as a nuisance, and the a drain on city budgets and personal paychecks	Trees are generally recognized as important and beneficial	Trees are seen as valuable infrastructure and vital to the community's well being. THe urban forest is recognized for the unique environmental, economic and social services it provides in the community	A significant portion of the population sees trees as a nuisance.	Share UTC results and invite participation. Couple this with "how to" information related to tree preservation, protection, planting and care.	High
Regional Collaboration	Neighboring communities and regional groups are actively cooperating and interacting to advance the region's stake in the city's urban forest	Little or no interaction between neighboring communities and regional groups	Neighboring communities and regional groups share similar goals and policy vehicles related to trees and urban forest	Regional urban forestry planning, coordination and management is widespread	Strength- PHS, watershed groups Audubon, stormwater coordinator with neighboring communities	Continue to partner with these groups in planning and planting.	

Assessment of Urban Forestry

The Management Approach (1/2)

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Indicators of a sustainable forest	Overall Objective of Industry Standard	Performance Levels			Abington Today	Next Steps	Priority H/M/L
		Low	Moderate	Good			
Tree Inventory	Comprehensive, GIS-based, current inventory of all intensively-managed public trees to guide management, with mechanisms in place to keep data current and available for use. Data allows for analysis of age-distribution, condition, risk, diversity, suitability	No inventory or out-of-date inventory of publicly owned trees	Partial or sample-based inventory of publicly-owned trees. Inconsistently updated	Complete, GIS-based inventory of publicly-owned trees, updated on a regualra, systematic basis	Street tree inventory updated 2020	Set up Township GIS-based tree management system. Add park tree inventory.	High
Canopy Assessment	Accurate, high resolution, and recent assessment of existing and potential city-wide tree canopy cover that is regularly updated and available for use across various departments, agencies and disciplines	No tree canopy assessment	Sample-based canopy cover assessment, or dated (over 10 years old) , high resolution canopy assessment	High-resolution tree canopy assessment using aerial photographs or satellite imagery	On track to complete in 2020.	Revisit when the next LIDAR data become available.	
Management plan	Existence and buy-in of a comprehensive urban forest management plan to achieve city-wide goals. Re-evaluation is conducted every 5 to 10 years	No urban forest management plan exists	A plan for the publicly-owned forest resource exists but is limited in scope, acceptance and implementation	A comprehensive plan for the publicly owned forest resource exists and is accepted and implemented	Actively developing a master tree plan.	Complete Master Tree Plan in 2020.	High
Risk management plan	All publicly-owned plans are managed for maximum public safety by way of maintaining a city-wide inventory	Request-based, reactive system. The condition of publicly-owned trees is unknown	There is some degree of risk abatement thanks to knowledge of publicly-owned trees, though generally still managed as a request-based reactive system	There is a complete tree inventory with risk assessment data and a risk abatement program in effect, Hazards are eliminated within a set time period depending on the level of risk	Largely a request-based system.		High
Maintenance of publicly-owned trees (trees managed extensively)	All intensively-managed, publicly-owned trees are well maintained for optimal health and condition in order to extend longevity and maximize benefits. A reasonable cyclical pruning program is in place, generally targeting 5 to 7 year cycles. The maintenance program is outline in the management plan.	Request-based, reactive system. No systematic pruning program is in place for publicly-owned trees.	All publicly-owned trees are systematically maintained, but pruning cycle is inadequate	All publicly-owned trees are proactively and systematically maintained and adequately pruned on a cyclical basis	Street trees maintenance is inadequate-improper pruning and mulching.	Engage the services of an arborist to prioritize and oversee maintenance of publicly owned trees.	
Maintenance of publicly-owned natural areas (trees managed extensively)	The ecological structure and function of all publicly-owned natural areas are protected and enhanced while accommodating public use where appropriate	No natural areas management plans are in effect	Only reactive management efforts to facilitate public use (risk abatement)	Management plans are in place for each publicly-owned management area focused on managing ecological structure and function and facilitating public use	Plans in place for AWS and putting in place for BS Preserve, Many STC planting sites in parklands and riparian areas	Assess all public owned natural areas and develop a prioritized maintenance plan.	High

Assessment of Urban Forestry

The Management Approach (2/2)

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Indicators of a sustainable forest	Overall Objective of Industry Standard	Performance Levels			Abington Today	Next Steps	Priority H/M/L
Planting program	Comprehensive plan and effective tree planting and establishment program is driven by canopy cover goals, equity considerations, another priorities according to the plan. Tree planting and establishment is outlined in the management plan.	Tree establishment is ad hoc	Tree establishment is consistently funded and occurs an annual basis	Tree establishment is directed by needs derived from a tree inventory and other community plans and is sufficient in meting canopy cove objectives	Annual funding, but lower than needed to sustain canopy.	Define and prioritize planting needs based on recent UTC analysis, inventories and public input.	High
Tree protection policy	Comprehensive and regularly updated tree protection ordinance with enforcement ability is based on community goals. The benefits derived from trees on public and private property are ensured by the enforcement of existing policies	No tree protection policy	Policies are in place to protect trees, but he policies are not well enforced of ineffective	Protection policies ensure the safety of treason public and private land. The policies are enforced and supported by significant deterrents and shared ownership of city goals.	Policy is inadequate.	Adopt the proposed ordinance recommendations related to tree preservation, protection and replacement.	High
City staffing and equipment	Adequate staff and access to the equipment and vehicles to implement the management plan. A high level urban forester or planning professional, strong operations staff, and solid certified arborist technicians	Insufficient staffing levels, insufficiently trained staff, and/or inadequate equipment and vehicle availability	Certified arborists and professional urban foresters on staff have some professional development but are lacking adequate staff levels or adequate equipment	Multi-disciplinary team with the urban forestry unit, inclusion and urban forestry professional, operations manager, and arborist technicians. Vehicles and equipment are sufficient to complete required work	Lacking arborist skills and oversight.	Define responsibilities and retain the services of a consulting arborist.	High
Funding	Appropriate funding in place to fully implement both proactive and reactive needs based on a comprehensive urban forest management plan	Funding comes from the public sector only, and covers only reactive work	Funding levels (public and private) generally cover mostly reactive work. Low levels of risk management and planning in place	Dynamic, active funding form engaged private partners and adequate public funding are used to proactively manage and expand the future forest	Strong base of support from state and regional funders.	Set goals based on the master tree plan. Define a fundraising strategy to achieve these goals.	High
Disaster preparedness and response	A disaster management plan is I place related to thecdty's urban forest. The plan includes staff roles, contracts, resigns priorities, debris management and a crisis communication plan. Staff are regularly trained and/or updated	No disaster response plan is in place	A disaster plan is in place but pieces are missing candor staff are not regularly trained of updated	A robust disaster management plan is in place, regularly updated and staff I fully trained on roles and processes	Need to assess current state. Anticipate we will find that the disaster plan as it pertains to trees is reactive in nature.	Gain an understanding or the Township disaster plan.	
Communication	Effective avenues of two-way communication exist between the city departments and between city and its citizens. Messaging is consistent and coordinated, when feasible	No avenues are in place. City departments and public determine on and ad-hoc basis the best messages and avenues to communicate	Avenues are in place, but used sporadically and without coordination or only on a one-way basis	Avenues are in place for two way communication, are all used with targeted, coordinated messages.	Excellent avenues are in place and continue to improve. Targeted messaging exists for SLF and selected projects.	Create routine messaging specific to urban forestry.	High