

APPENDIX B

Glossary

501(c)(3): A charitable, nonprofit organization that is tax exempt under section 501(c)(3) of the Internal Revenue Code, that does not attempt to influence legislation as a substantial part of its activities and that does not participate in any campaign activity for or against political candidates. The term charitable is used in its generally accepted legal sense and includes advancement of education or science, maintaining public works, lessening the burdens of government, and combating community deterioration. [Source: irs.gov] <http://www.irs.gov/charities/charitable/article/0,,id=96099,00.html>, <http://www.irs.gov/charities/charitable/article/0,,id=175418,00.html>.

aesthetic benefits: The estimated total annual benefit associated with property value, aesthetics, and other social and economic improvements is \$572,882, for an average of \$19.33 per street tree. Aesthetic and social benefits were not calculated for the entire urban forest.

air quality benefits: In the *American Lung Association State of the Air 2011*, Pittsburgh was ranked third on the list of the most polluted metropolitan areas (on short-term and annual airborne particle measurement scales). Trees improve air quality by absorbing and reducing air pollutants (ozone [O₃], carbon monoxide [CO], nitrogen dioxide [NO₂]), particulate matter less than 10 microns (PM₁₀), and sulfur dioxide [SO₂]). The i-Tree Eco analysis estimated that Pittsburgh's urban forest removes 532 tons of air pollution per year, with an associated value of \$3.75 million. Street trees alone account for \$252,935 in annual air quality improvements.

ALB: The Asian longhorned beetle is a destructive wood-boring pest of maple and other hardwoods. ALB was first discovered in the US 1996 and is believed to have been introduced into the US from wood pallets and other wood-packing material accompanying cargo shipments from Asia. (Source: aphis.usda.gov) http://www.aphis.usda.gov/plant_health/plant_pest_info/asian_lhb/index.shtml.

American National Standards Institute (ANSI): ANSI is a private, non-profit organization that facilitates the standardization work of its members in the US. ANSI's goals are to promote and facilitate voluntary consensus standards and conformity assessment systems, and maintain their integrity.

ANSI A300 standards: Tree care performance parameters established by ANSI; can be used to develop specifications for tree maintenance.

arboriculture: The art, science, technology, and business of commercial, public, and utility tree care.

balled-and-burlapped (B&B): A tree or other plant dug and removed from the ground for re-planting, with the roots and soil wrapped in burlap. (Source: isa-arbor.com/dictionary).

benefit-cost ratio: The ratio of the cumulative benefits provided by trees, expressed in monetary terms, compared to the costs associated with their management, also expressed in monetary terms.

biogenic utility: A utility based on the net benefit of freed energy and other benefits from trees, which can be calculated in dollars, pounds of pollution filtered, gallons of rainwater intercepted, and kWh of energy not used.

biogenic volatile organic compounds (BVOCs): BVOC emissions are a widespread and ubiquitous contributor to background air and are part of the natural background chemistry. It is only after anthropogenic emissions are added to the natural background that harmful levels of ozone result. However, biogenic emissions must be considered when examining anthropogenic emission control strategies. (Source: [epa.gov](http://www.epa.gov)) http://www.epa.gov/AMD/pdf/epa_science_forum2.PDF.

bioswales: Bioswales are storm water runoff conveyance systems that provide an alternative to storm sewers. They can absorb low flows or carry runoff from heavy rains and snowmelt to storm sewer inlets or directly to surface waters. Bioswales improve water quality by enhancing infiltration of the first flush of storm water runoff and filtering the large storm flows they convey. (Source: usgs.gov) <ftp://ftp-fc.sc.egov.usda.gov/MT/www/technical/water/Bioswale.pdf>.

blue roofs: Blue roofs are non-vegetated source controls that detain stormwater. Weirs at the roof drain inlets and along the roof can create temporary ponding and gradual release of stormwater. Coupled with light-colored roofing material, they can provide sustainability benefits through rooftop cooling. (Source: [nyc.gov](http://www.nyc.gov)) http://www.nyc.gov/html/dep/html/stormwater/green_pilot_project_ps118.shtml.

canopy assessment: See urban tree canopy (UTC) assessment.

canopy cover: As seen from above, it is the area of land surface that is covered by tree canopy.

canopy: Branches and foliage which make up a tree's crown.

carbon benefits: As part of their metabolic process, trees sequester carbon dioxide (CO₂) in the form of woody and foliar biomass. The gross sequestration of Pittsburgh's urban forest is about 14,200 tons of carbon per year, with an associated value of \$262,000. Net carbon sequestration in the urban forest is about 10,100 tons. Trees also reduce CO₂ indirectly through a decrease in energy demand; the entire urban forest provides an estimated benefit of \$70,600 annually by reducing the amount of carbon released by fossil-fuel based power plants (a reduction of 3,840 tons of carbon emissions). Due to their proximity to residential buildings, street trees account for a significant portion of the urban forest's CO₂ reduction, providing the average Pittsburgh homeowner with an estimate of \$9.73 in net carbon benefits.

carbon dioxide (CO₂): A colorless, odorless, non-poisonous gas that is a normal part of earth's atmosphere. Carbon dioxide is a product of fossil-fuel combustion as well as other processes. It is considered a greenhouse gas as it traps heat radiated into the atmosphere and thereby contributes to the potential for global warming. (Source: [eia.gov](http://www.eia.gov)) http://www.eia.gov/emeu/efficiency/carbon_emissions/glossary.html.

carbon monoxide (CO): A colorless, odorless poisonous gas produced by incomplete combustion of organic matter. (Source: science.education.nih.gov) <http://science.education.nih.gov/supplements/nih2/chemicals/other/glossary/glossary1.htm>.

carbon sequestration: The fixation of atmospheric carbon dioxide in a reservoir (for example, a tree) that absorbs or takes up released carbon from another part of the carbon cycle through biological or physical processes. (Source: [eia.gov](http://www.eia.gov)) http://www.eia.gov/emeu/efficiency/carbon_emissions/glossary.html.

carbon storage: Carbon stored in the urban forest over the life of the trees as a result of sequestration measured in pounds as the CO₂ equivalent.

catch basin: Catch basins, also known as storm drain inlets and curb inlets, are inlets to the storm drain system. They typically include a grate or curb inlet and a sump to capture sediment, debris, and pollutants. Catch basins are used in combined sewer overflow watersheds to capture floatables and settle some solids, and they act as pretreatment for other treatment practices by capturing large sediments. (Source: epa.gov) http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=factsheet_results&view=specific&bmp=77.

CO: See carbon monoxide (CO).

CO₂: See carbon dioxide (CO₂).

compensatory value: See structural value.

condition: The general condition of each tree rated during the inventory according to the following categories adapted from the ISA's rating system: excellent (100%), very good (90%), good (80%), fair (60%), poor, (40%), critical (20%), dead (0%).

corrective pruning: Removal of dead, diseased, broken, closely parallel and crossing limbs. (Source: extension.usu.edu) http://extension.usu.edu/files/publications/publication/HG_363.pdf.

CU-Structural Soil™: Soil mix developed at Cornell University that may be used as a base to safely bear pavement loads after compaction that will also allow root penetration and tree growth.

cyclical pruning: Continual routine maintenance cycle to ensure the pruning of all trees every seven years. Cyclical pruning reduces long-term costs because of pruning crew efficiencies, and it can prevent problems before they exist in the case of pruning to train young trees. Young trees that receive training pruning develop good form and long, straight trunks with few defects. The resulting trees are structurally more sound with less chance of failure as they mature.

diameter at breast height (DBH): See Tree Size.

diameter: See Tree Size.

Dutch elm disease (DED): Dutch elm disease (DED) is one of the most destructive shade tree diseases in North America. The disease affects American elms (and other elm species, to a varying extent), killing individual branches and eventually the entire tree within one to several years. (Source: na.fs.fed.us) <http://na.fs.fed.us/fhp/ded/>.

ecosystem: The complex of a living community and its physical and chemical environment, functioning together as a unit in nature, with some inherent stability. (Source: epa.gov) <http://www.epa.gov/glnpo/lakeerie/glossary.html>.

or An ecosystem is a biotic community together with its physical environment, considered as an integrated unit. Implied within this definition is the concept of a structural and functional whole unified through life processes. An ecosystem may be characterized as a viable unit of community and interactive habitat. Ecosystems are hierarchical and can be viewed as nested sets of open systems in which physical, chemical, and biological processes form interactive subsystems. Some ecosystems are microscopic and the largest comprises the biosphere. Ecosystem restoration can be directed at different-sized ecosystems within the nested set, and many encompass multiple states, more localized watersheds, or a smaller complex of aquatic habitat. (Source: el.erdc.usace.army.mil) http://el.erdc.usace.army.mil/emrrp/emris/emrshelp/what_is_an_ecosystem_ecosystem_management.htm.

emerald ash borer (EAB): An exotic beetle that was discovered in southeastern Michigan in 2002. The adult beetles nibble on ash foliage but cause little damage. The larvae (the immature stage) feed on the inner bark of ash trees, disrupting the tree's ability to transport water and nutrients. Emerald ash borer probably arrived in the United States on solid wood-packing material carried in cargo ships or airplanes originating in its native Asia. (Source: emeraldashborer.info).

energy benefits: Trees provide shade by intercepting sunlight and wind and reducing air movement, which results in savings in energy costs for climate-controlled buildings. Pittsburgh's urban forest is estimated to reduce energy-related costs to residential buildings by \$3.15 million annually (2002 prices). Street trees alone account for \$1.2 million in energy benefits. This may be the most direct benefit in terms to which the average Pittsburgh homeowners can relate. The average street tree on the right-of-way in front of their property produces \$40.66 in annual savings to that homeowner.

environmental justice: The fair treatment and meaningful involvement of all people regardless of race, color, sex, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

evapotranspiration: The sum of evaporation and transpiration. Excluding evaporation from surface-water bodies, evapotranspiration would be defined as the water lost to the atmosphere from the ground surface, evaporation from the capillary fringe of the groundwater table, and the transpiration of groundwater by plants whose roots tap the capillary fringe of the groundwater table. (Source: ga.water.usgs.gov) <http://ga.water.usgs.gov/edu/watercycleevapotranspiration.html>.

exotic (pests/diseases): Exotic pests are organisms that are introduced into an area beyond their natural range and become pests in the new environment. They are also referred to as alien, non-native, or introduced pests. (Source: cdfa.ca.gov) <http://www.cdfa.ca.gov/invasives/>.

genera: plural of *genus*.

genus: A taxonomic category ranking below a family and above a species and generally consisting of a group of species exhibiting similar characteristics. In taxonomic nomenclature, the genus name is used, either alone or followed by a Latin adjective or epithet, to form the name of a species.

geographic information system (GIS): A technology that is used to view and analyze data from a geographic perspective. The technology is a piece of an organization's overall information system framework. GIS links location to information (such as people to addresses, buildings to parcels, or streets within a network) and layers that information to give you a better understanding of how it all interrelates.

global positioning system (GPS): GPS is a system of earth-orbiting satellites that make it possible for people with ground receivers to pinpoint their geographic location.

green infrastructure: Green infrastructure uses natural features provide environmental and community benefits (for example, to manage stormwater). By improving the environment and preserving open space, green infrastructure supports sustainable communities. (Source: water.epa.gov) <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>.

green roofs: Green roofs consist of a vegetative layer that grows in a specially designed soil, which sits on top of a drainage layer. Green roofs are more costly than conventional roofs but are capable of absorbing and retaining large amounts of stormwater. Green roofs provide sustainability benefits such as absorbing air and noise pollution, rooftop cooling by reducing UV radiation absorption, creating living environments for birds, and increasing the quality of life for residents. (Source: nyc.gov) http://www.nyc.gov/html/dep/html/stormwater/green_pilot_project_ps118.shtm.

green stormwater management system: Using green infrastructure (vegetation and soil) to manage rainwater where it falls. By weaving natural processes into the built environment, green infrastructure provides not only stormwater management, but also flood mitigation and air quality management. (Source: water.epa.gov) <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>.

green streets: A natural systems approach to reduce stormwater flow, improve water quality, reduce urban heating, enhance pedestrian safety, reduce carbon footprints, and beautify neighborhoods. Through various combinations of plants and soils, these objectives can be met on different types of streets in many settings. Green street features may include vegetated curb extensions, sidewalks planters, landscaped medians, vegetated swales, permeable paving, and street trees. (Source: water.epa.gov) http://water.epa.gov/aboutow/eparecovery/upload/2009_09_10_eparecovery_EPA_ARRA_Green_Streets_FINAL.pdf

greenspace: A land use planning and conservation term used to describe protected areas of undeveloped landscapes.

gray stormwater management system: Using single-purpose stormwater infrastructure, such as piping, to dispose of rainwater. (Source: water.epa.gov) <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>.

gross annual benefit: Calculation specific to i-Tree Streets, it is the estimation of the combined stormwater, energy, air quality, carbon dioxide, and aesthetic/other benefits reported for one year.

gypsy moth (GM): One of North America's most devastating forest pests. The species originally evolved in Europe and Asia and has existed there for thousands of years. In either 1868 or 1869, the gypsy moth was accidentally introduced to the US. The gypsy moth is known to feed on the foliage of hundreds of species of plants in North America but its most common hosts are oaks and aspen. Gypsy moth hosts are located through most of the coterminous US, but the highest concentrations of host trees are in the southern Appalachian Mountains, the Ozark Mountains, and in the northern Lake States. A major concern is the potential loss of economically critical and ecologically dominant oak species. Most studies of forest compositional changes with gypsy moth defoliation indicate that less susceptible species will dominate the forest, so in effect, forests may have fewer gypsy moth problems in the future. (Source: fs.fed.us) <http://www.fs.fed.us/ne/morgantown/4557/gmoth/>.

high-risk tree: Trees that cannot be cost-effectively or practically treated. The majority of the trees in this category have multiple or significant defects affecting less than 40% of the trunk, crown, or critical root zone. Defective trees and/or tree parts are most likely between 4–20 inches in diameter and can be found in areas of frequent occupation, such as a main thoroughfare, congested streets, and/or near schools.

impervious surface: Surface material (for example, pavement) that impedes the infiltration of water into soil. A significant portion of rainfall in a natural watershed is absorbed into soil, stored as groundwater, and discharged to streams through seeps and springs. Flooding is less significant in these conditions because some of the runoff during a storm is absorbed into the ground. As watersheds are urbanized, many vegetated areas are replaced by impervious surfaces, which reduces the area where infiltration to groundwater can occur. Thus, much more stormwater runoff occurs, which results in an increased likelihood of more frequent and more severe flooding. (Source: ga.water.usgs.gov) <http://ga.water.usgs.gov/edu/impervious.html>.

invasive (pest/disease): An invasive species is a species that does not occur naturally in a specific area and whose introduction does or is likely to cause economic (including agricultural) or environmental harm or harm to human health. Common traits of invasive pests and pathogens include rapid reproduction, fast growth, wide dispersal, altering of growth or form to suit a particular habitat, tolerating a wide range of environmental conditions and the ability to feed on a variety of different foods. (Source: [cdffa.ca.gov](http://www.cdffa.ca.gov)) <http://www.cdffa.ca.gov/invasives/>.

invasive (exotic tree): A tree species that is out of its original biological community. Its introduction into an area causes or is likely to cause economic or environmental harm, or harm to human health. An invasive, exotic tree has the ability to thrive and spread aggressively outside its natural range. An invasive species that colonizes a new area may gain an ecological edge since the insects, diseases, and foraging animals that naturally keep its growth in check in its native range are not present in its new habitat.

inventory: See Tree Inventory.

i-Tree Canopy: The i-Tree Canopy tool allows easy and accurate estimation of tree and other cover classes (*e.g.*, grass, building, roads, etc.) within a city or any bound area. This tool randomly lays points (number determined by the user) onto Google Earth imagery and the user then classifies what cover class each point falls upon. The user can define any cover classes that they like and the program will show estimation results throughout the interpretation process.

i-Tree Streets: i-Tree Streets is a street tree management and analysis tool that uses tree inventory data to quantify the dollar value of annual environmental and aesthetic benefits: energy conservation, air quality improvement, CO₂ reduction, stormwater control, and property value increase. (Formerly STRATUM).

i-Tree tools: State-of-the-art, peer-reviewed software suite from the US Forest Service that provides urban forestry analysis and benefits assessment tools. The i-Tree tools help communities of all sizes to strengthen their urban forest management and advocacy efforts by quantifying the structure of community trees and the environmental services that trees provide.

landslide: A type of “mass wasting” which denotes any down slope movement of soil and rock under the direct influence of gravity. The term "landslide" encompasses events such as rock falls, topples, slides, spreads, and flows, such as debris flows such as mudflows. Landslides can be initiated by factors such as rainfall, changes in groundwater, disturbance, and change of a slope by construction activities. Failure of a slope occurs when the force that is pulling the slope downward (gravity) exceeds the strength of the earth materials that compose the slope. They can move slowly (millimeters per year) or can move quickly and disastrously, as is the case with debris-flows. Debris-flows can travel down a hillside of speeds up to 200 miles per hour (more commonly, 30-50 miles per hour), depending on the slope angle, water content, and type of earth and debris in the flow. These flows are initiated by heavy, usually sustained, periods of rainfall, but sometimes can happen as a result of short bursts of concentrated rainfall in susceptible areas. (Source: landslides.usgs.gov) <http://landslides.usgs.gov/learning/faq/>.

Leadership in Energy and Environmental Design (LEED): An internationally recognized framework for identifying and implementing practical and measurable green building design, construction, operations, and maintenance solutions. LEED certification provides independent, third-party verification that a building, home, or community was designed and built using strategies aimed at achieving high performance in key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. (Source: [usgbc.org](http://www.usgbc.org)) <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1988>.

monoculture: A population dominated by one single species or very few species.

Municipal Forest Resource Analysis: Analyses that combine results of a citywide inventory with benefit-cost modeling data. The structure and written content of these analyses come from the entire series of Municipal Forest Resource Analysis reports prepared and published by the USDA Forest Service, Pacific Southwest Research Station, Center for Urban Forest Research. The Municipal Forest Resource Analysis Reports are companions to the regional Tree Guides and i-Tree’s STRATUM application developed by the USDA Forest Service, Pacific Southwest Research Station, Center for Urban Forest Research (Source: fs.fed.us and Davey Resource Group).

net annual benefits: Citywide benefits and costs calculated according to category and summed. Net benefits are calculated as benefits minus costs.

nitrogen dioxide (NO₂): Nitrogen dioxide is a compound typically created during the combustion processes and is a major contributor to smog formation and acid deposition.

NO₂: See nitrogen dioxide (NO₂).

non-native: See invasive (exotic tree) and invasive (pest/disease).

O₃: See ozone (O₃).

oak wilt: An aggressive disease that affects many species of oak. First identified in 1944, it is one of the most serious tree diseases in the eastern US, killing thousands of oaks each year in forests, woodlots, and home landscapes. The fungal pathogen that causes the disease is thought by most to be native to the eastern US, but difficulty in isolating and identifying the fungus delayed recognition of the extent of its impact until the 1980s. (Source: na.fs.fed.us) <http://na.fs.fed.us/pubs/detail.cfm?id=921>.

ordinance: See Tree Ordinance.

outfall: The point where water flows from a conduit, stream, or drain, where effluent is discharged into receiving waters. (Source: (Source: ofmpub.epa.gov)).

ozone (O₃): A strong-smelling, pale blue, reactive toxic chemical gas with molecules of three oxygen atoms. It is a product of the photochemical process involving the sun’s energy. Ozone exists in the upper layer of the atmosphere as well as at the earth’s surface. Ozone at the earth’s surface can cause numerous adverse human health effects. It is a major component of smog.

particulate matter (PM₁₀): A major class of air pollutants consisting of tiny (less than 10 microns) solid or liquid particles of soot, dust, smoke, fumes, and mists.

pathogen: Microorganisms (for example, bacteria, viruses, or parasites) that can cause disease in other organisms (for example, humans, animals, or plants). Some pathogens are highly specific to particular species; others can require two or more types of organisms to complete their life cycles, while others can opportunistically move among several or many host species. (Source: ofmpub.epa.gov).

permeable pavements: Refers to a wide variety of surfaces, including concretes, asphalts, and various types of grid and paver systems, that allow for rapid infiltration of water.

PM₁₀: See particulate matter (PM₁₀).

pruning: The selective removal of plant parts to meet specific goals and objectives.

restorative pruning: Selective pruning to improve the structure, form, and appearance of trees that have been severely headed, vandalized, or damaged.

right-of-way (ROW): A strip of land generally owned by a public entity over which facilities, such as highways, railroads, or power lines, are built.

risk assessment: Risk assessment uses protocol based on the US Forest Service Community Tree Risk Rating System to assess the probability of tree (or tree part) failure (or structural defect(s) that will likely result in failure) based on observed, current conditions; the probability of target impact by the tree or tree part (determined by use and occupancy of the area), and other risk factors.

risk: Combination of the probability of an event occurring and its consequence.

SO₂: See sulfur dioxide (SO₂).

social benefits: In addition to the quantified environmental and economic benefits, research has shown that trees provide many social benefits that help to improve quality of life. Trees can lead to reduced crime rates, decreased amounts of human stress, and shorter lengths of hospital stays. Kuo and Sullivan (2001(a)) studied apartment buildings in Chicago and found that buildings with high levels of greenery had 52% fewer crimes than those without any trees, and buildings with medium amounts of greenery had 42% fewer crimes. Tree-lined streets also make our streets safer by reducing traffic speeds and the amount of stress drivers feel which likely reduces road rage (Wolf, 1998(b); Kuo and Sullivan, 2001(b)). Ulrich (1984, 1986) found that hospital patients who were recovering from surgery and had a view of a grove of trees through their windows required fewer pain relievers, experienced fewer complications, and left the hospital sooner than similar patients who had a view of a brick wall.

species: Fundamental category of taxonomic classification, ranking below a genus or subgenus and consisting of related organisms capable of interbreeding. An organism belonging to such a category, represented in binomial nomenclature by an un-capitalized Latin adjective or noun following a capitalized genus name.

stem: A woody structure bearing buds, foliage, and giving rise to other stems.

stormwater benefits: A tree's surface area (including leaves, branches, and trunk) acts as a catch for rainfall; as trees intercept and store water, they reduce runoff volume and delay the onset of peak stormwater flows. A tree creates porous space in the soil through its root system, thus increasing the capacity and rate of soil infiltration, which then reduces overland flow during periods of peak runoff. Tree canopies reduce soil erosion and surface transport by diminishing the impact of raindrops on barren surfaces. With an average savings of \$11 per street tree per year, Pittsburgh's street trees intercept an estimated 41.8 million gallons of stormwater annually, for an estimated value of \$334,601.

street tree: A street tree is defined as a tree within the right-of-way.

structural soils: See CU-Structural Soil™.

structural value: Represent the cost to replace all trees and can be viewed as the value of the urban forest as a structural asset.

sulfur dioxide (SO₂): A strong-smelling, colorless gas that is formed by the combustion of fossil fuels. Sulfur oxides contribute to the problem of acid rain.

swale: A low-lying or depressed and often wet stretch of land.

topping: Topping is not an acceptable pruning practice. Reduction of tree size using internodal cuts without regard to tree health or structural integrity.

training pruning: Based on *ANSI A300 Standards*, pruning of young trees to correct or eliminate weak, interfering, or objectionable branches to improve structure. These trees, up to 20 feet in height, can be worked with a pole pruner by a person standing on the ground.

transpiration: The process by which moisture is carried through plants from roots to small pores on the underside of leaves, where it changes to vapor and is released to the atmosphere.

tree benefit: An environmental, economic, or social improvement that benefited the community and resulted mainly from the presence of a tree. The benefit received has real or intrinsic value associated with it.

tree inventory: A comprehensive database containing information or records about individual trees typically collected by an arborist.

tree ordinance: Tree ordinances are policy tools used by communities striving to attain a healthy, vigorous, and well-managed community forest. Tree ordinances simply provide the authorization and standards for management activities.

tree size: The diameter of a tree to the nearest inch in one-inch size classes at 4.5 feet above ground, also known as diameter at breast height (DBH) or diameter.

tree: A tree is defined as a perennial woody plant that may grow more than 20 feet tall. Characteristically, it has one main stem, although many species may grow as multi-stemmed forms.

urban forest: All trees on private and public lands within a municipality or a community.

urban tree canopy (UTC) assessment: A study performed of land cover classes to gain an understanding of the tree canopy coverage, particularly as it relates to the amount of tree canopy that currently exists and the amount of tree canopy that could exist. Typically performed using aerial photographs, GIS data, or Lidar.

watershed: An area of land where all of the water that is under it or drains off of it goes into the same lake, river, or ocean.

zoning: A system of land use regulations which designates the permitted uses of land based on location.