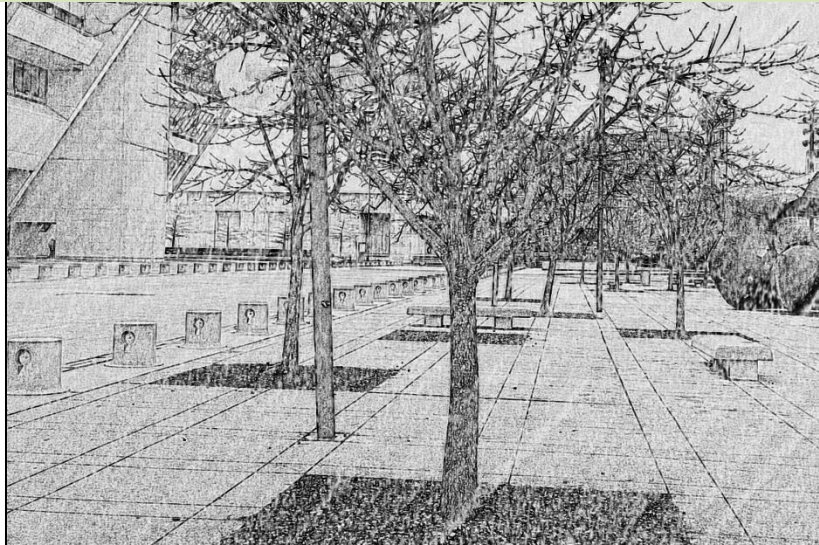




# **ARTICLE X LANDSCAPE AND TREE PRESERVATION REGULATIONS**



## **OVERVIEW**



**City Plan Commission Briefing - April 27, 2017**

# TOPICS FOR DISCUSSION

- Background
- Why Amend?
- Purpose Statement
- Approach
- Key Amendments
- Conclusion
- Schedule

# BACKGROUND

- On March 1, 1986 the **LANDSCAPE** zoning ordinance originated under Chapter 51.
- On April 25, 1990, the City Council passed a resolution “to support the protection and preservation of trees across the city”.
- On May 25, 1994, the **LANDSCAPE** ordinance was amended in to Chapter 51A along with a new **TREE PRESERVATION** ordinance.
- In 2003 amendments were made to:
  - Definitions
  - Shared Access Development regulations
  - Enforcement methods
  - Tree mitigation procedures
  - Construction site tree protection

# BACKGROUND

- In 2005, the Urban Forest Advisory Committee (UFAC) was formed by the City Council.
- In September 2007, UFAC began to address revising the tree division of Article X.
- In 2009, UFAC collaborated with the Green Building Task Force to include development community input.
- 2010, meetings concluded with conceptual changes, agreed upon by development advocates and UFAC, which established a sustainability matrix to reward developers for best practices.
- In 2010 and 2011, UFAC presented recommendations to the City Council Quality of Life Committee.

# BACKGROUND

- February 5, 2015, the Zoning Ordinance Advisory Committee (ZOAC) began the process of amending Article X, beginning with the General Division.
- The next two years at ZOAC was focused on education, public input, discussion, and evaluation of options and proposals.
- February 16, 2017, the Zoning Ordinance Advisory Committee moved the proposed amendments to City Plan Commission.

# WHY AMEND

- **Completion of requested investigations in UFAC's briefings** to City Council Quality of Life Committee in 2010 and 2011 on needed amendments and proposed recommendations
- **City policies and ordinances** over the past 10 years have been directed towards sustainable development.
  - 'Water-wise' Landscaping-Water Conservation Strategic Plan by Dallas Water Utilities
  - Green Building ordinances
  - iSWM criteria manual for construction
  - Complete Streets

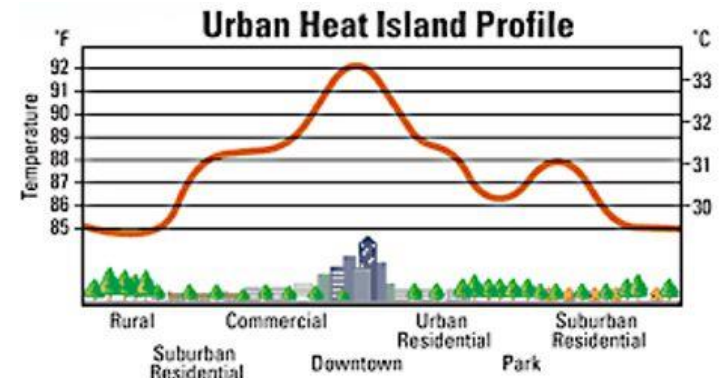
# WHY AMEND

- ***forwardDallas!*** Comprehensive Plan
  - Core Value: Healthy Environment
  - Ideal: The city's natural resources are conserved and protected for current and future generations.
  - Initiative: Ensure environmental sustainability.
    - Protect Dallas water quality and watersheds
    - Increase the urban tree canopy
    - Improve air quality
    - Improve energy efficiency
    - Protecting and enhancing open space
    - Provide access to parks, open spaces and recreation.

# WHY AMEND

- **Local Studies**

- HARC Heat Island Study – 2009
- Urban Heat Island Factoring Public Health (soon to be released) - shows effect of heat island abatement to public health factors
- Texas Trees Foundation ‘State of the Urban Forest’ comprehensive study in 2014.
  - 14.7 million trees valued at \$9 billion.
  - The city’s average tree canopy (including the Great Trinity Forest) is 28.7%.





# WHY AMEND

- **New research and technology**
  - Advances in scientific research in the relationship of the trees to the public health and quality of life.
  - Research in healthy tree growth requirements and their soil volume demands
  - Technology advances to allow for tree root growth in high density pedestrian environments
    - structural soils
    - suspended pavement systems

# WHY AMEND

- **Industry Standards**

- Best management practices

- Development and implementation of generally accepted industry standards and best management practices for worker safety, and for tree pruning, planting and transplanting, tree risk assessment, soil management, construction site management, and other practices (ANSI A300).



# WHY AMEND

- **Public Interest**
  - development advocates
  - urban forest conservation community
  - professionals in tree services, and landscape architects and designers

# ARTICLE X

## PURPOSE STATEMENT

Effects of development.

The process of urban growth and development with its alteration of the natural topography, vegetation, and creation of impervious cover can have a negative effect on the ecological balance of an area by causing increases in air temperatures and accelerating the processes of runoff, erosion and sedimentation.

# ARTICLE X

## PURPOSE STATEMENT

Economic base.

... The economic base of the city can and should be protected through the conservation ~~preservation~~ and enhancement of the unique natural beauty, environment, and vegetative space in this area.

# ARTICLE X

## PURPOSE STATEMENT

“The process of urban growth and development with its alteration of the natural topography, vegetation, and creation of impervious cover can have a negative effect on the ecological balance of an area by causing increases in air temperatures and accelerating the processes of runoff, erosion and sedimentation. **The economic base of the city can and should be protected through the conservation preservation and enhancement of the unique natural beauty, environment, and vegetative space in this area. Recognizing that the general objectives of this article are to promote and protect the health, safety, and welfare of the public, the city council further declares that this article is adopted for the following specific purposes:”**

# ARTICLE X

## PURPOSE STATEMENT

- 1) To aid in stabilizing the environment's ecological balance by contributing to the processes of
  - air purification,
  - oxygen regeneration,
  - ground-water recharge, and
  - storm water runoff retardation, and filtrationwhile at the same time aiding in noise, glare, wind, and heat abatement.



# ARTICLE X

## PURPOSE STATEMENT

- 2) To provide visual buffering between land uses of differing character to alleviate the harshness of urban life.





# ARTICLE X

## PURPOSE STATEMENT

3) To enhance the beautification of the city.



# ARTICLE X

## PURPOSE STATEMENT

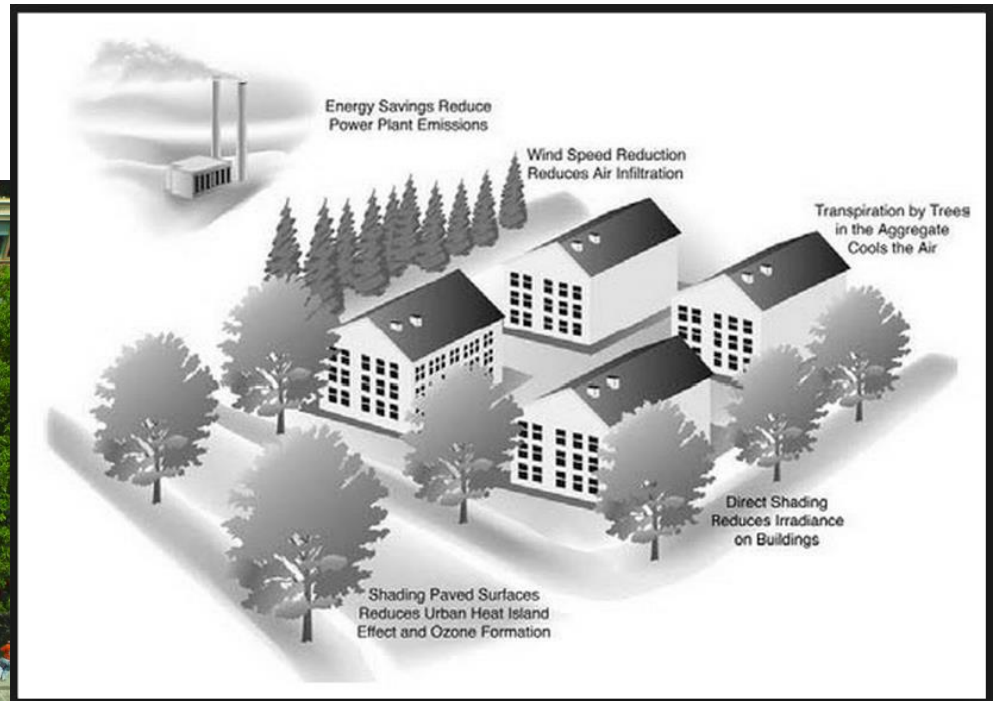
4) To enhance and safeguard property values and to protect public and private investment.



# ARTICLE X

## PURPOSE STATEMENT

5) To conserve energy.



# ARTICLE X

## PURPOSE STATEMENT

6) To provide habitat for wildlife.



# ARTICLE X

## PURPOSE STATEMENT

- 7) To encourage the preservation of large trees which, once removed, can be replaced only after generations.



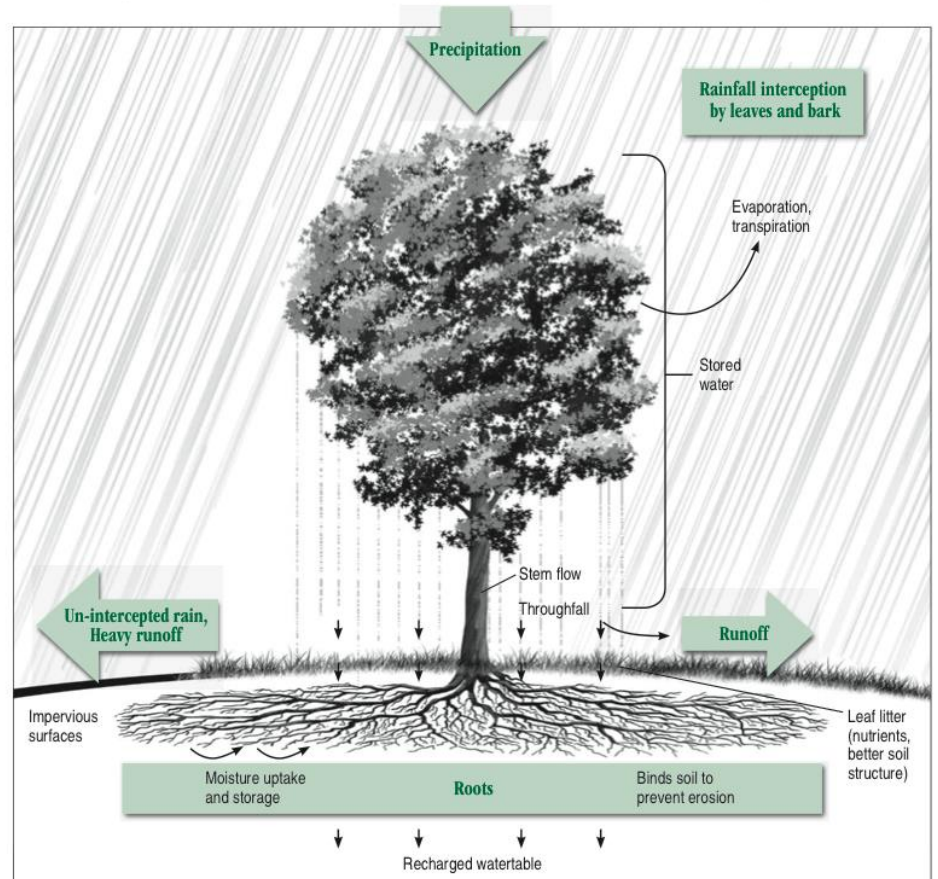
# ARTICLE X

## PURPOSE STATEMENT

8) To conserve water.



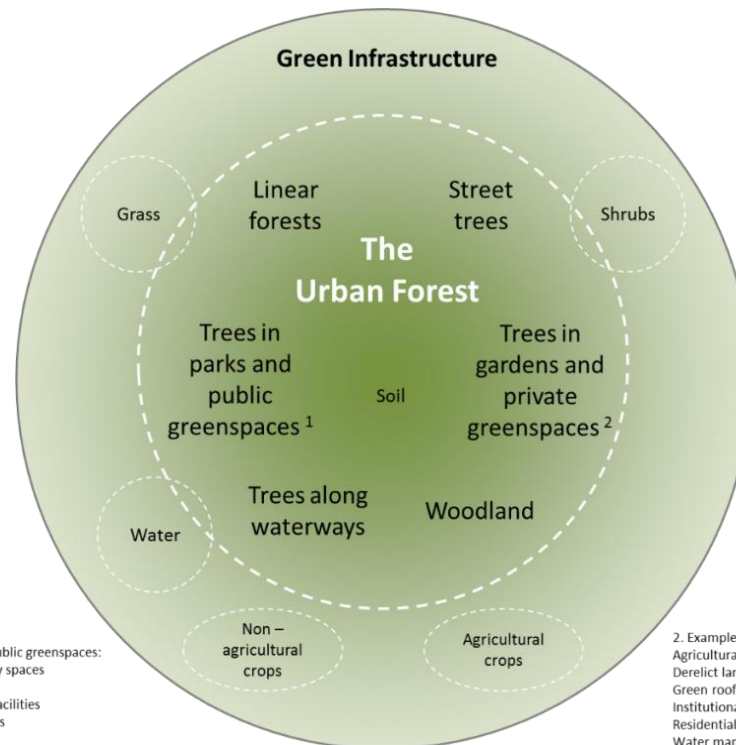
Important Ways a Tree Helps with Stormwater Management



# ARTICLE X

## PURPOSE STATEMENT

- 9) To recognize and conserve the urban forest as part of the city's green infrastructure.



Institute of  
Chartered  
Foresters, UK

1. Examples of public greenspaces:  
Civic and amenity spaces  
Green corridors  
Outdoor sports facilities  
Parks and gardens  
Urban orchards

2. Examples of private greenspaces:  
Agricultural land  
Derelict lands  
Green roofs  
Institutional grounds  
Residential gardens  
Water management spaces

# A CONSERVATION *or* PRESERVATION ORDINANCE

***Conservation*** and ***Preservation*** are often used interchangeably though have very different meanings.

## CONSERVATION is the management of

- Conservation seeks the ***proper use of nature***
- Conservation is the ***sustainable use and management*** of natural resources including wildlife, water, air, and earth deposits
- The conservation of renewable resources, like trees, involves insuring that they are not consumed faster than they are replaced.
- The conservation of natural resources usually focuses on the needs and interests of human beings.
- Conservation accepts that change and progression are necessary for a better future, but only when the changes take place in ways that are not wasteful
- *Webster's* – Planned management of a natural resource to prevent exploitation, destruction, or neglect

## PRESERVATION is the protection of

- Preservation seeks ***protection of nature from use***
- Preservation ***discourages the use*** of resources in order to maintain there present state
- Preservation places a value on nature that does not relate to the needs of human beings
- *Webster's* – Keep safe from injury, harm or destruction; to protect.



# APPROACH

- Article X is comprised of 3 Divisions:
  - 10.100 In General
  - 10.120 Landscaping
  - 10.130 Tree preservation, Removal, and Replacement
- Approach all 3 divisions as a whole – symbiotic relationship
- Develop requirements that incentivize sustainability on each site
- Research other cities regulations
- Identify and remedy issues and conflicts with current code
- Ongoing conversations between city staff, professional designers, citizens, development industry representatives, and urban forest advocacy groups

# KEY AMENDMENTS

## **10.100 General**

- This division supports the concepts and regulations put forward in the other 2 divisions.
- Developing a Landscape and Urban Forest Manual to support Article X; providing direction, technical information, and educational tools for site design and implementation.

# KEY AMENDMENTS

## 10.120 Landscaping

1. Improved soil and planting area requirements and tree location requirements for the establishment, maintenance and successful growth of shade trees to reach their potential at maturity
2. Landscape requirements based on zones of the site to allow for flexibility and adaptability of site design to accommodate different property sizes and scale of development.
  - a) Street buffer zone
  - b) Residential buffer zone
  - c) Interior zone

# KEY AMENDMENTS

## **10.120 Landscaping (cont.)**

3. Developed design options implementing a simple point system which provides greater flexibility and options to meet the master design for a development.
4. Planting requirements to provide tree canopy coverage in parking lots.

# KEY AMENDMENTS

## **10.130 Urban Forest Conservation** ~~Tree Preservation, Removal, and Replacement.~~

1. Developed the **Forest Stand Delineation (FSD)** as a comprehensive tree survey to determine tree canopy coverage as an option to current standard tree survey and may be used when determining credit for trees that are being preserved on the site.

# KEY AMENDMENTS

## **10.130 Urban Forest Conservation ~~Tree Preservation, Removal, and Replacement.~~ (cont.)**

2. Modified the Protected and Unprotected Tree list based on the importance of the tree to the health and vitality of the Dallas Urban Forest and the classification of Protected Trees.
  - a) Historic: by volunteered deed restrictions (x3)
  - b) Significant: rated for significant size or species that cannot be readily replaced (x1.5)
  - c) Class 1: rated for location in sensitive land area (x1)
  - d) Class 2: rated for the benefits provided in the urban environment (x.7)
  - e) Class 3: rated for general condition and growth habits (x.4)

# KEY AMENDMENTS

## **10.130 Urban Forest Conservation ~~Tree Preservation, Removal, and Replacement.~~ (cont.)**

3. Additional methods for attaining tree credits towards mitigation in addition to the four current options (donate to a city park, plant on other property within 5 miles, conservation easement, payment into Reforestation Fund) to incentivize sustainable development practices on site:
  - a) Legacy Tree planting
  - b) Habitat Preservation and Restoration
  - c) Sustainable Development Incentive process
  - d) Single family tree canopy cover retention
  - e) Tree canopy cover assessments for recreational and institutional uses on large sites
  - f) Transplanted tree credit
  - g) Old-field canopy cover assessment credit
  - h) Development Impact Area Waiver (Build area exemption)

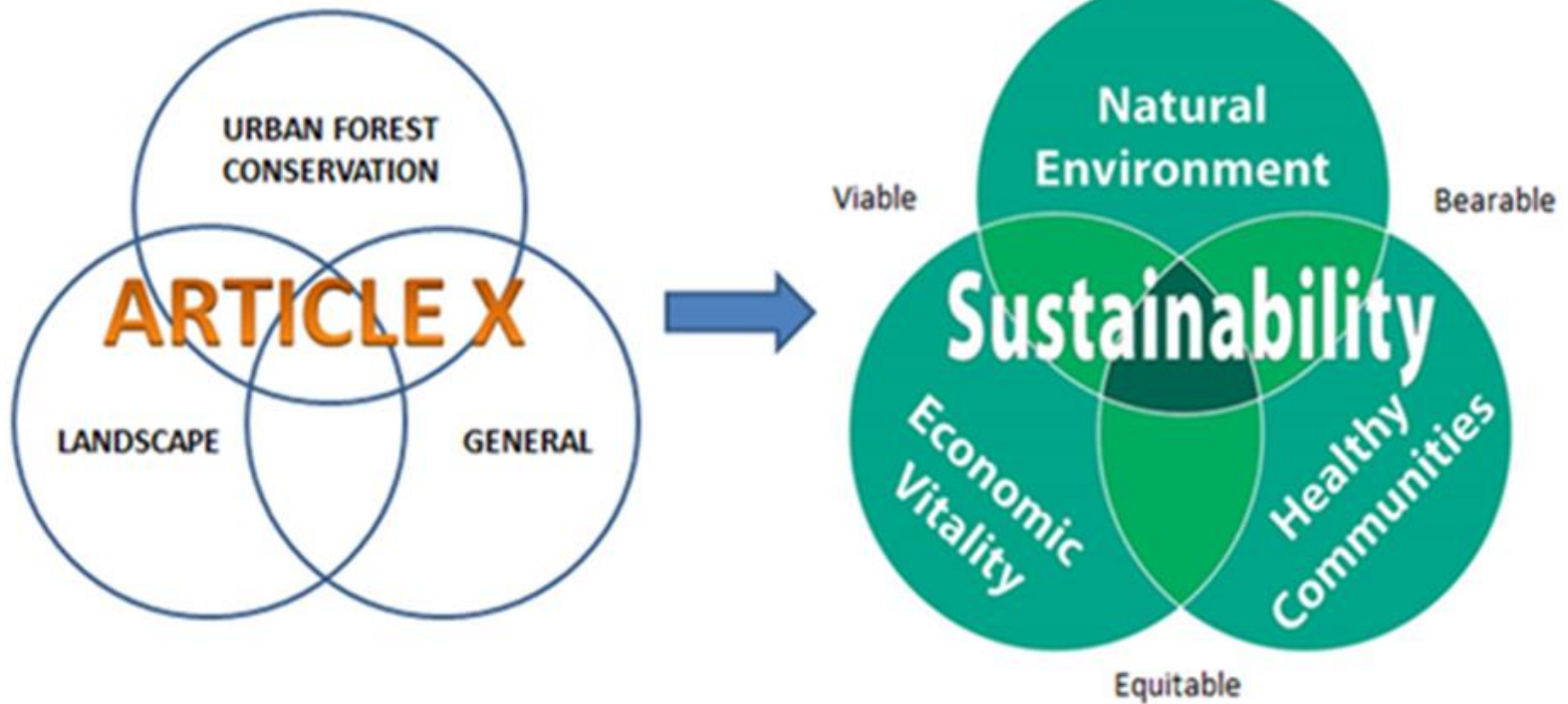
# KEY AMENDMENTS

## **10.130 Urban Forest Conservation ~~Tree Preservation, Removal, and Replacement.~~ (cont.)**

4. Improved timing requirements for meeting mitigation compliance to coincide with the completion of the development.
5. Use of Forest Stand Delineation (FSD) to identify and enforce on illegal tree removal without permit or physical evidence of the removed trees by use of aerial imagery and other resources.



# CONCLUSION



# SCHEDULE

- May 18, 2017 CPC Briefing and Agenda item for Public Input
- June 8, 2017 CPC Briefing and Agenda item for Public Input
- June 22, 2017 CPC Briefing and Agenda item for Public Input and Action