Rain to Roots Ambassador Program- *November Meeting*

Welcome!

- What is your name?

- What is your favorite tree or plant?

The Strategy – Green Stormwater Infrastructure

Benefits of GSI:

- Supports tree canopy

- Reduces temperatures

- Reduces potable water use

- Mitigates flooding

- Promotes cleaner waterways

- Creates wildlife habitat

Learn more about GSI and its benefits at Sustainable Tempe – Green Stormwater Infrastructure.

Rain to Roots Master Plan

- **Project Purpose**
  - Expand green infrastructure & urban cooling initiatives.
  - Promote cross-departmental coordination & planning.
  - Identify opportunities for long-term funding.

Green Stormwater Infrastructure helps us address…

Record-breaking Extreme Heat

Severe Drought & Water Use

Flooding & Water Quality Concerns

Need for Climate-Ready Vegetation

Project Overview

Assessing the Current State

Codes & Standards

Urban Forestry Master Plan Update

Future Funding Strategy

Pilot Projects

Public Outreach

Tempe Urban Forestry Managing the Tree and Shade Resource for the Community
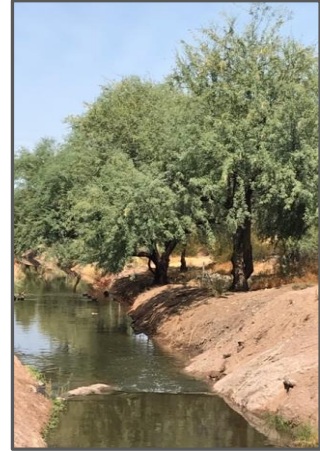
Rain to Roots
November 1, 2023

Sustainable
Tempe

What is the Urban Forest?

- The collection of trees growing in our city
- All vegetation: public and private
- The human–forest interface
- A keystone for urban living
- A low risk, high-yield investment for the community

The Benefits and Values of Trees

Environmental Benefits

- Improve air quality
- Sequester carbon, reduce the greenhouse effect, mitigate Urban Heat Island
- Conserve energy by protecting surroundings from sun and wind
- Cool the air through transpiration
- Reduce stormwater runoff and soil erosion
- Provide habitat for wildlife

Psychological and Social Benefits

- Reduce stress and mental fatigue
- Enhance mental health
- Enhance recuperation rates
- Reduce psychological precursors to crime
- Enhance community pride
- Heal and restore communities
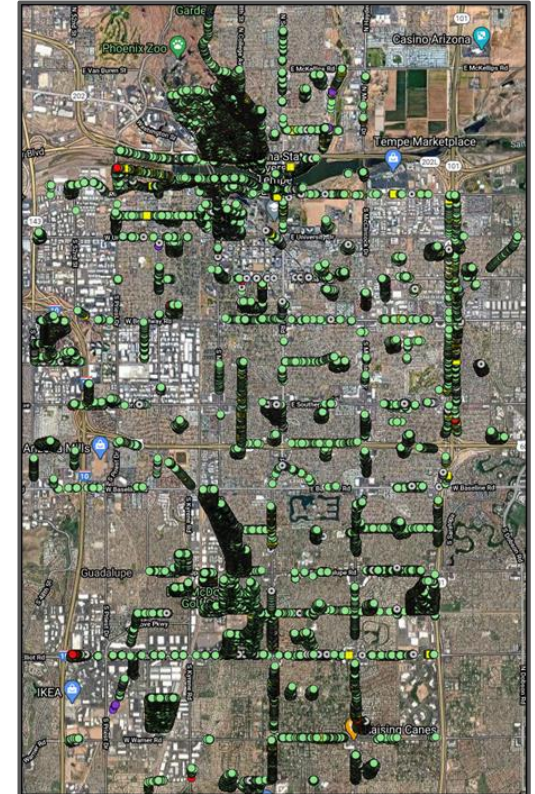- Increase recreational opportunities

Economic Benefits

- Increase residential and business property values
- Increase tax base for community
- Attract visitors, businesses, and new residents
- Increase rental of apartments and offices and reduce vacancy rates
- Encourage shoppers to linger
- Defer maintenance on materials that are degraded by heat, like pavements

Tempe Tree #'s

- 28,500 trees:
    - Park/Preserves/Facilities ~18,500
    - ROW/Trails ~10,000
    - Over 100 species and varieties
- $58M value
- $1.2M in annual environmental/economic benefits
- 11.4% Tree Canopy cover

Urban Forestry Master Plan Goals

- Increase tree canopy, replace missing/diseased/declining trees, and update landscape in parks, ROW, and city-maintained properties.

- Demonstrate the city's commitment.

- Empower residents, businesses, organizations, and city staff to collaboratively create and care for the urban forest resource.

- Supports other Strategic Priorities and performance measures

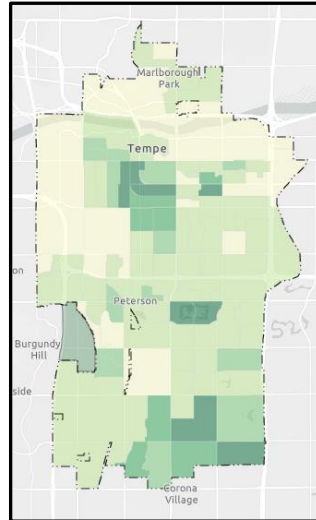- Revision as part of the Resilient Tempe Master Plan

Tree and Shade Canopy

Building Urban Forest Resilience

- Establish a proactive tree care and management team
- Utilize the Tree Canopy and Tree Equity Map for planting strategies
- Neighborhood outreach programs for tree planting

Tree Canopy and Equity Maps

www.urbanforestry.tempe.gov

A Closer Look at Tree Canopy Cover

Residential Canopy Cover	Parks / Preserve Canopy Cover	Commercial Canopy Cover	Educational Institutions Canopy Cover
16.6%	9.8%	10.2%	8.3%

What are the top 10 tree/palm/tall cactus species in Tempe?

1 - Prosopis velutina (VELVET MESQUITE)

2 - Prosopis chilensis (CHILEAN MESQUITE)

3 - Parkinsonia microphylla (YELLOW PALO VERDE)

4 - Washingtonia robusta (MEXICAN FAN PALM)

5 - Dalbergia sissoo (INDIAN ROSEWOOD)

6 - Ulmus parvifolia (CHINESE ELM)

7 - Quercus virginiana (SOUTHERN LIVE OAK)

8 - Carnegiea gigantea (SAGUARO CACTUS)

9 - Parkinsonia florida (BLUE PALO VERDE)

10 - Pinus halepensis (ALEPPO PINE)

Tree Benefits Dashboard

Interactively pan through a map of Tempe's tree inventory and see the benefits of the trees. As you explore the map, the benefit widgets will update in real time! There are tools for selecting a certain set of sites and/or filtering by species.

Tree Benefits Dashboard

Tree Benefits Web Map

Interactively explore the benefits of individual trees and/or map heat maps of individual tree benefit attributes. Using the 'Layer List' you can add various layers to the map. Click on an individual tree to see the specific benefits and/or select a group of trees to open the attribute table for the trees. There is also a swipe tool for comparing the heat map of various layers.

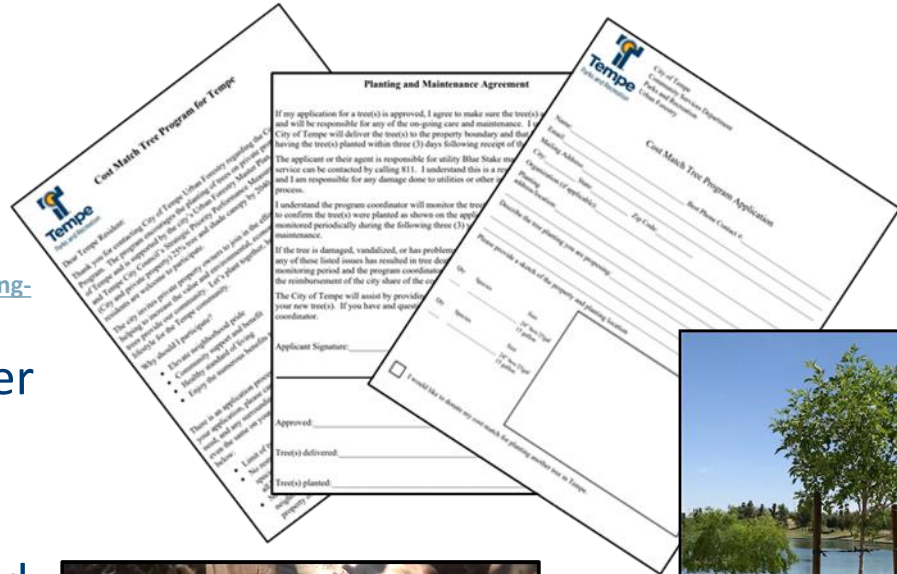**Tree Benefits Web Map**

Tree Canopy Cover Map

Interactively pan through a map of Tempe's tree canopy cover and environmental benefits by census tracts, census block, character areas, and more!

Tree Canopy Cover Map

Community Outreach

- Cost Match Tree Program
  - **www.tempe.gov/tempetrees**

- Living Tree Donation Program
  - **www.tempe.gov/government/community-services/living-tree-program#**

- TreeBate Program through Water Conservation
  - **www.tempe.gov/government/municipal-utilities/water/water-conservation/rebates/treebate#**

- MaryAnne Corder Neighborhood Grants
  - **https://www.tempe.gov/government/community-development/neighborhood-services/neighborhood-grant-program**

Community Education and Support

- Community meetings and information exchange

- Townhall style meetings

- Training, workshops, and educational opportunities

- Tree selection, planting, and care technical assistance information

- Review and consider development policies and practices

Exploring the Urban Forest

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Questions, Thoughts, and Suggestions?

27 years and 21-year Growth Award

4 years

Upcoming Ambassador Program Meetings

December 6th: Pilot Projects

January 3rd: Stormwater

Meetings on the First Wednesday of the Month, 5:30-6:30 PM

Questions?

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