



# Welcome!

The Importance of the  
Natural Environment  
in Meeting our  
Sustainability Goals  
webinar  
will begin shortly



# The Importance of the Natural Environment in Meeting our Sustainability Goals

December 8, 2020



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Click on Q&A anytime during the presentation to ask questions



Mute



Chat



Raise Hand



Q&A

Leave

- Review the Natural Environment Chapter and Key Actions of 2020 Sustainability and Climate Action Plan (S/CAP)
- Share work in progress in meeting key actions
- Get feedback on the updated Goals & Key Actions



NATURAL  
ENVIRONMENT

# 2020 Sustainability and Climate Action Plan Areas



ENERGY

Christine Tam  
Evon Ballash



MOBILITY

Sylvia Star-Lack  
Rebecca Atkinson



ELECTRIC  
VEHICLES

Shiva Swaminathan  
Hiromi Kelty  
Mike Nafziger



WATER

Karla Dailey  
Karin North



CLIMATE  
ADAPTATION &  
SEA LEVEL RISE

Julie Weiss  
Christine Luong



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ENVIRONMENT

Walter Passmore  
Pam Boyle Rodriguez



ZERO WASTE

Paula Borges  
Maybo AuYeung  
Wendy Hediger

- Co-benefits can describe other desirable outcomes from our actions beyond GHG reductions
  - Improve **Public Health**
  - Improve **Air Quality** through reduced exposure
  - Improve **Public Safety**
  - Increase **Productivity**
  - Increase **Resource Conservation**
  - Provide **Regional Benefit** that extends beyond the city
  - **Equity**: Address existing inequity
  - Reduce **Cost of Living** through cost savings

# Natural Environment Influence

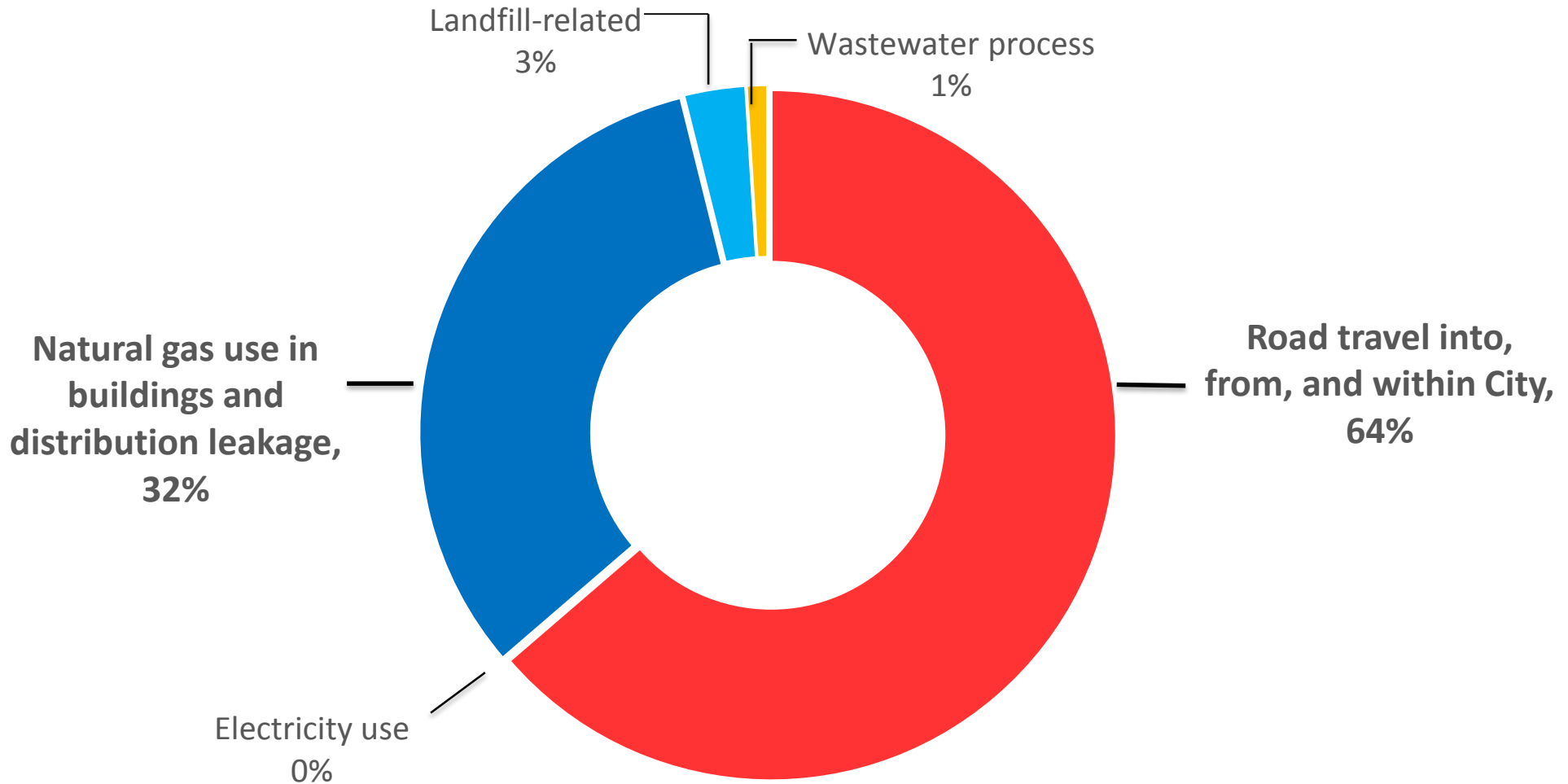
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- Sequestration, storage, and avoidance of carbon emissions
- Disposition (attitudes)
- Ecosystem dynamics
  - Humans are parts of the whole (desire to self-regulate)
  - Historic ecology versus the industrial revolution (carrying capacity versus urbanization/consumption)
  - Interconnectedness





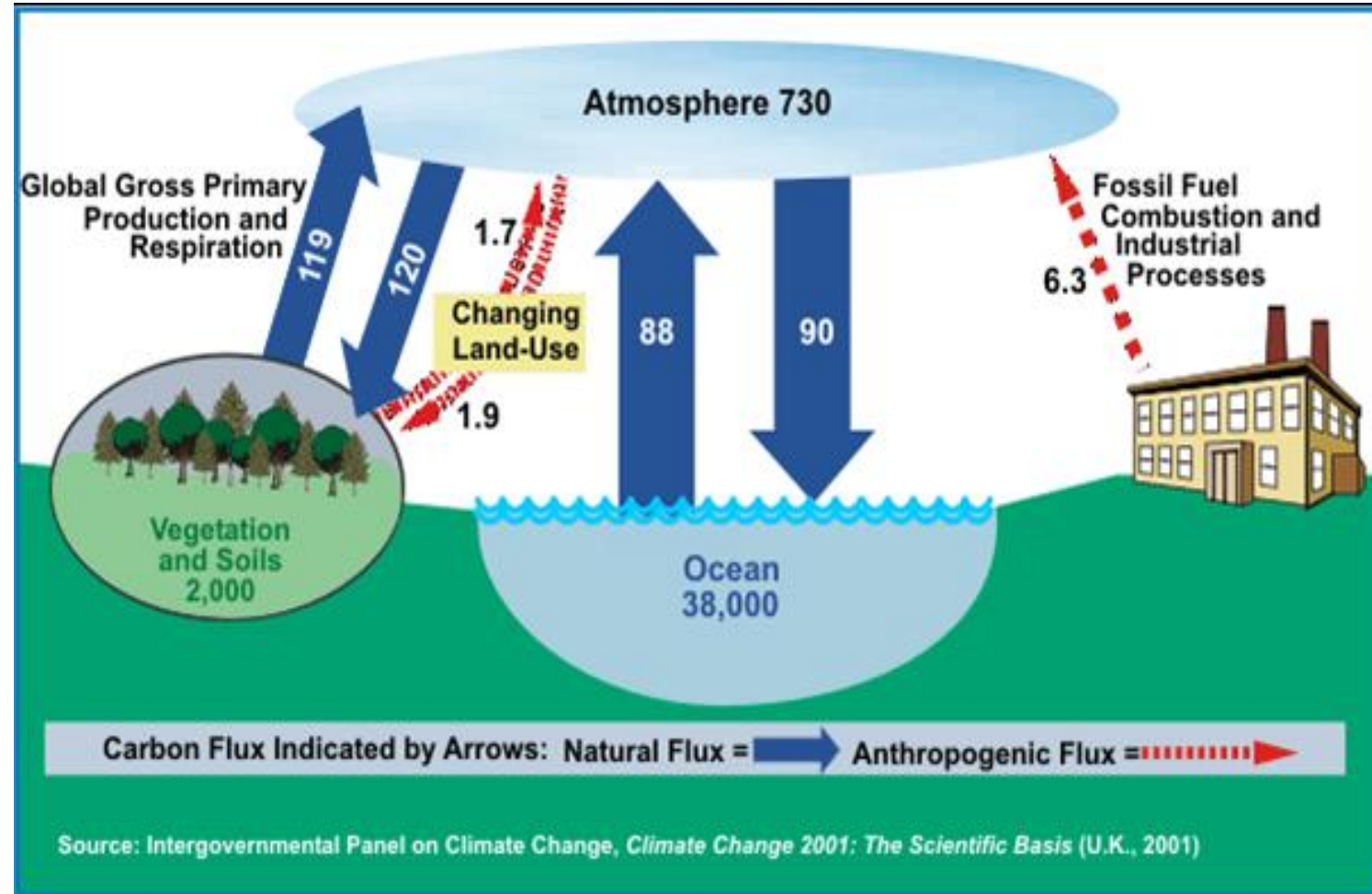
# GHG Emission Sources in Palo Alto



Source: 2018 Palo Alto Municipal Operations & Community GHG Emissions

# The Carbon Cycle

- Natural environment perpetually correcting to balance
- Emissions reductions should be coupled with sound management (of fire, timber, soil, water, and land to avoid loss)
- Micro-reductions of emissions can influence the macro natural cycles



- Restore and enhance resilience and biodiversity of our natural environment
- Increase tree canopy to 40% city-wide coverage by 2030
- Future goal regarding amount of impervious surface treated by green stormwater infrastructure (GSI)



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# Interdepartmental Collaboration



# Natural Environment Key Actions

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Provide carbon sequestration and other environmental benefits

- Water quality protection
- Heat island/climate moderation

Maximize biodiversity and soil health

- DRAFT Tree & Landscape Manual
- Native plants focus

# Natural Environment Key Actions

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Expand Water Efficient Landscape Ordinance

- State of CA adopted currently
- Could target biodiversity or other

Ensure No Net Tree Canopy Loss for all projects

- Private development project review
- Incentives, information, and other motivators

Establish a baseline for carbon storage of tree canopy

- Baseline canopy cover calculation
- Local offset projects

# Natural Environment Key Actions

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Reduce and eliminate the use of pesticides in parks

- Integrated Pest Management Plan since 2001
- 11 Parks and 8 Facilities are Pesticide-Free

Enhance pollinator habitat in parks

- Pollinator plants exist in parks and open space areas
- 5 pollinator gardens planted specifically to be habitats by volunteers

# Parks Practices Towards Goals

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- The City of Palo Alto has been Bay Area leader in reducing the amount and toxicity of its pesticides used in parks, open spaces and City facilities.
  - The City has reduced pesticide use by over 90% since 2005.
- Planting pollinator plants to provide valuable habitat for pollinator species (such as bees and butterflies). Habitats also serve birds and beneficial insects such as lady bugs and praying mantis.
  - 5 dedicated gardens have been built and maintained by a volunteer group, the Primrose Way Pollinator Garden Group, in areas previously maintained by the City.







**Legend**

-  Pesticide-Free Facilities
-  Pesticide-Free City Parks
-  Pollinator Gardens

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Miles



POLL QUESTION 1: Would you be interested in information on how to incorporate pollinator plants on your own property?

- a) Very interested
- b) Somewhat interested
- c) Maybe—would like more information
- d) Not interested



GRAY -  
traditional  
approach

Transforming/  
Supplementing  
SD System

GREEN – veg,  
soils, natural  
processes

# Natural Environment Key Actions

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Implement the Green Stormwater Infrastructure Plan

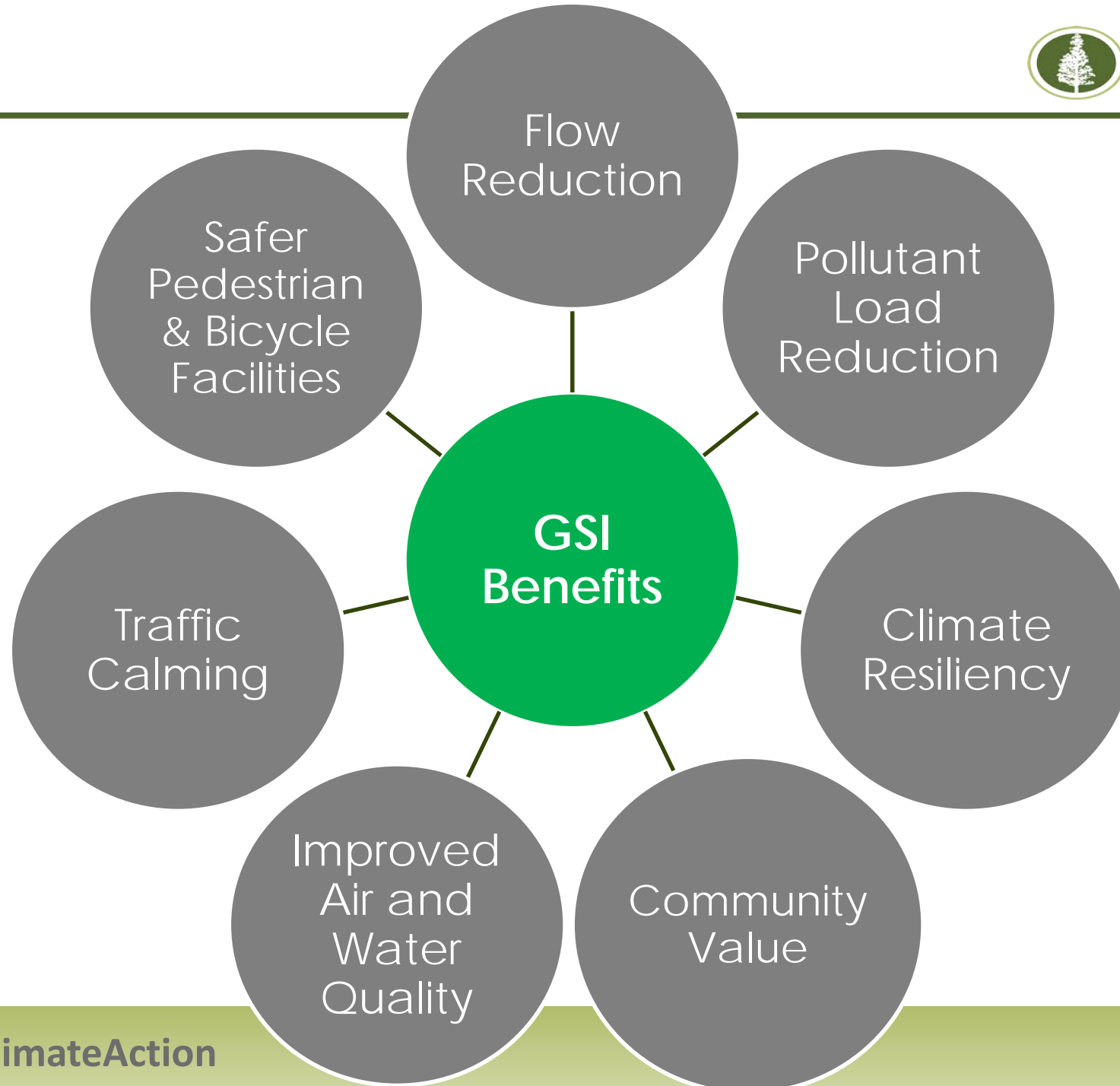
- Engineering Manual
- Southgate Pilot
- Stormwater Rebate Program

By 2023, baseline goal for treating impervious surfaces

- Feasible goal
- Collaborative project prioritization

POLL QUESTION 2: Which aspects of biodiversity should the City measure? Select top three (3) choices.

- a) Trees in the public right-of-way
- b) Trees on private, public, residential, and commercial properties
- c) Plants and trees in GSI (green stormwater infrastructure)
- d) Percentage of native plants in open space
- e) Other—write your answer in the chat function with the text "Poll 2"  
(E.g. "Poll 2: answer")



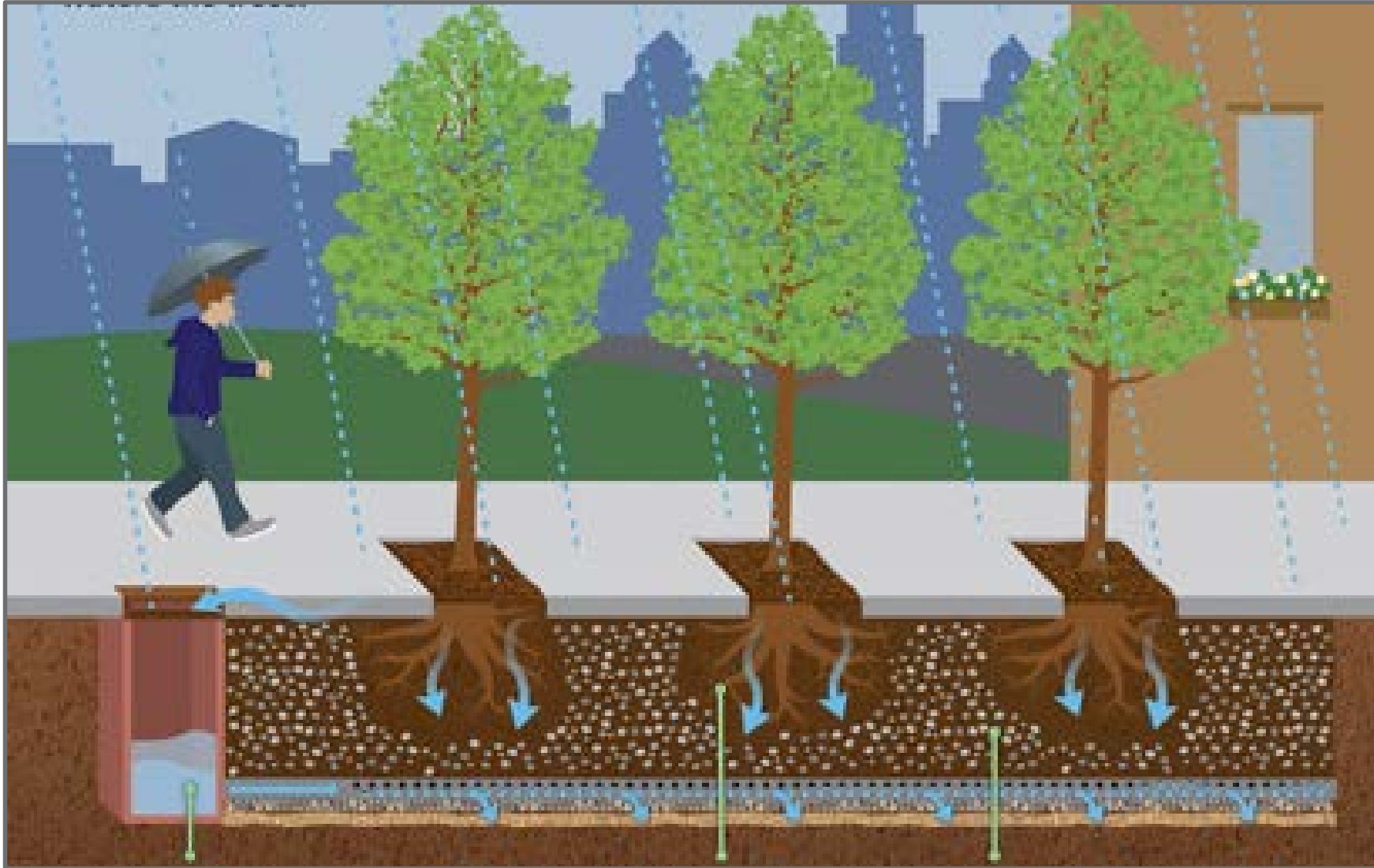




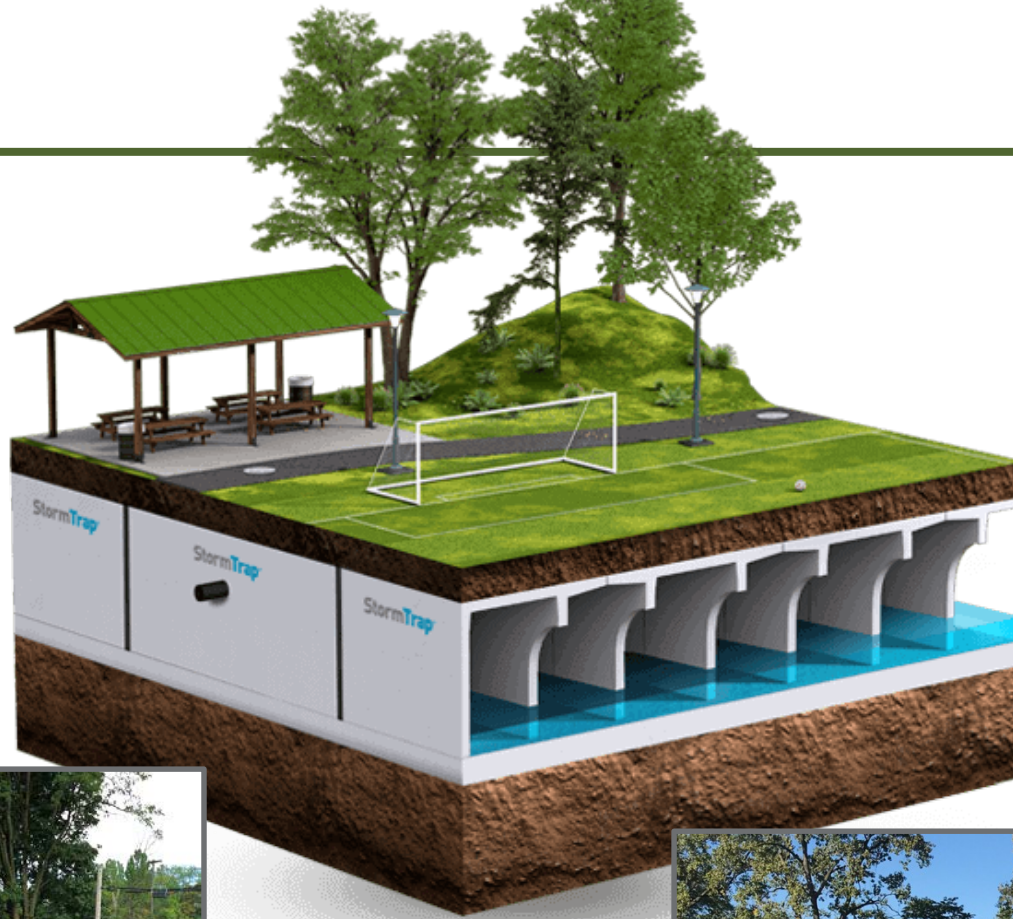
## Street GSI



# Tree Trench



# GSI Examples



POLL QUESTION 3: Would you be interested in helping to steward City-owned GSI measures? For example, caring for plants, maintaining cleanliness, etc.

- a) Yes
- b) No
- c) Maybe—would like more information

POLL QUESTION 4: Would you like to attend another webinar about any of the following? Select all that apply.

- a) Carbon sequestration
- b) Urban Forestry goals
- c) Parks efforts to increase biodiversity
- d) GSI (green stormwater infrastructure) efforts
- e) Other—write your answer in the chat function with the text "Poll 4"  
(E.g. "Poll 4: answer")

## 1. Upcoming Webinars:

- Sea Level Rise Update on Adaption Plan
- Virtual Forum to review the Results of the Impact Analysis
- Final 2020 S/CAP Webinar

## 2. Council and Commission Study Sessions on 2020 S/CAP Scenarios

## 3. Council approves 2020 S/CAP

Click on Q&A to ask questions

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Q&A

Leave



**SUSTAINABILITY & CLIMATE ACTION PLAN: *Acting Now for a Resilient Future***

**Thank You!**

