# Urban Forest Project Protocol:

# **A Practical Application**

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# Rationale for a GHG ProjectSustainable cities goals



#### **Eligible Project Operator**

- Eligibility
  - ✓ Municipalities
  - Educational Campuses
  - Utilities
  - ✓ Trees > 15 feet apart
- Ownership
  - Demonstrate clear and defensible right of ownership
     Exceed mandatory planting requirements



#### **Total Street & Park Tree Numbers**

40,000						
35,000			22 556	33 816	34.116	
30,000		00.007	33,330	00,010		
25,000 —	26,767	28,907				
20,000						
15,000						
10,000						
5,000						
0	1987	1997	2007	2010	Current	

# Removals, Replacements & Net Tree Gain



#### **Baseline Performance Standard**

- Current urban forest program
  - Maintains a stable tree population
  - Average annual Net Tree Gain
- Long Range Master Plan
   Adopted by City Council
- Exceed program planting requirements
  - Master Plan: stewardship of GHG planting sites
  - Planting commenced on12-14-11

#### Location & Permanence

- Open-growing trees >16-ft apart
  - Parks
  - Residential streets
  - Public landscapes & gov't. bldgs.
- Perpetual sites (100-year reporting period)
- First steps
  - SCAQMD grant (\$200k, plant 1,000 trees)
  - Identify 1,000 sites
  - Characterize permanence
  - Prioritize sites

# Starting a GHG Tree Project





# **Analyzing Site Conditions**

- Parkway dimensions
- Street right-of-way dimension
- Above-ground grow space
- Soil conditions
- Local weather conditions
- Street use

Will the site accommodate a GHG tree?
What is the disturbance potential?
Lowest = residential or parks



What is the disturbance potential?
Lowest = residential or parks
Moderate = main streets or medians





What is the disturbance potential?
– Lowest = residential or parks
– Moderate = main streets large parkways
– Highest = business districts





- Degree of public control by Agency Policy
  - Most control = parks, residential areas
  - Moderate control = public landscapes
  - Least control = business districts
- Sites can be affected by various projects
  - Street & sidewalk repairs
  - Utility work
  - Development projects
  - Large scale streetscape projects

- Longevity of the sites

  More GHG benefits

  Relative need for the canopy
  - Highest = areas with minimal canopy





Relative need for the canopy

 Highest = areas with minimal canopy
 Moderate = intermediate canopy



- Relative need for the canopy

   Highest = areas with minimal canopy
   Moderate = intermediate canopy
  - Lowest = good canopy cover



# **Determining the best species** Avoid using the Top 15 species



## **Determining the best species**

- Avoid species that are in the top 15
- Use proven performers
  - Select species with largest canopy
  - Select trees with environmental value

## **Determining the best species**

- Avoid species that are in the top 10
- Use the proven performers
- Designate new species in Master Plan
   Designated GHG Sites
  - Largest canopy for the site
  - Form consistent with existing species

## **Determining the best species**

- Avoid species that are in the top 10
- Use the proven performers
- Designate new species in Master Plan
- Tree Planting Partnership with AQMD
  - Use of native trees
  - Limited choices
  - Limited sites



• Tree/site longevity - 100 year reporting

- Minimize risk of tree loss
  - Site selection
  - Species selection
  - Planting and stewardship practices

## **Stewardship of GHG Sites**







## **Stewardship of GHG Sites**

- Budget
  - Maintenance funds included in line item
  - 3 year establishment period
    - Watering
    - Re-staking
    - Canopy training
    - Replacement
  - Incorporate into annual program
  - Collect data for reporting

#### **Tree Maintenance & Monitoring**

- Establishment (3-5 yrs)
  - 1 in-house crew
  - Water weekly summer (CNG truck)
  - Record daily vehicle & equip. use
  - Measure once/yr
- Post-Establishment
  - Incorporated into prune cycle (3-5 yr)
  - Record daily vehicle & equip. use
  - Measure during inspection/prune

#### **Registering the Project**

• Climate Action Reserve – Details required for the application • High level of detail - Costs • \$500 Application Fee • \$500 annual membership fee – Application resubmitted June, 2012 – 1<sup>st</sup> report May, 2013

## **Challenges to the Project**

• Plan development process

- Resident & community input
- Pace of the project planning
- Educational outreach

• No connection between project trees and value of community benefits