



**CivicSpark**

CivicSpark is a  
**Governor's Initiative**  
administered by the  
**Local Government**  
**Commission.**

*“Climate change is a global challenge that requires strong, sustained local action. This program gets young people into communities across California to help reduce emissions and boost energy efficiency.”*

*Governor Jerry Brown*



*“CivicSpark provides high-quality, technical support to local and regional governments, helping California communities:*

- *pursue clean energy;*
- *reduce greenhouse gas emissions;*
- *safeguard against climate change impacts; and,*
- *implement sustainable community strategies.”*

*Local Government Commission*



**CivicSpark**



**48** AmeriCorps Members



**9** Regions of California



**11** Months



**CivicSpark**



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**The Team**

# Why We Are Here

Resources are available to **help you apply for Cal Fire Grants**

The LGC and the CaUFC were awarded a CalFire grant **to assist YOU in applying** for Greenhouse Gas Reduction Fund grants.



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Our objective is to **maximize the number of State dollars invested in the San Joaquin Valley.**

Help determine **urban forest program** needs

Assist with **CaFIRE Grant** writing process

**Quantify the benefits** of urban forestry

Review **existing inventories, policies and plans**

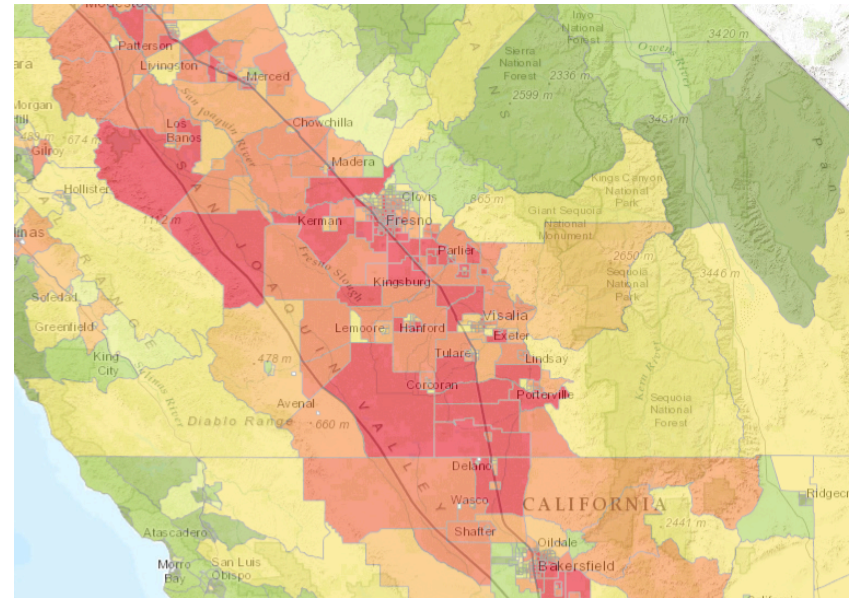
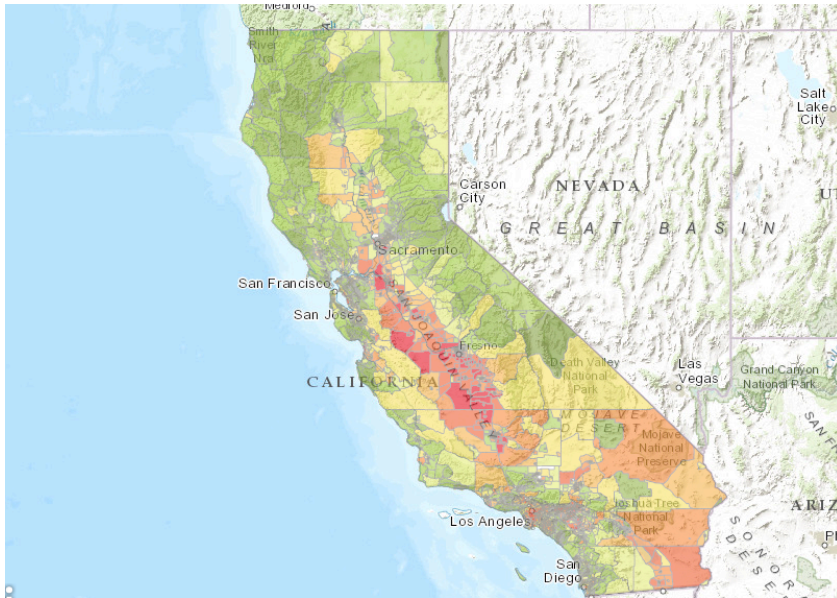
Coordinate **collaborative partnerships**

Assess the health of the **existing urban forest and maintenance needs**



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# Train staff on CalEnviroScreen



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# Assist staff with **Urban Forest Management Toolkit**

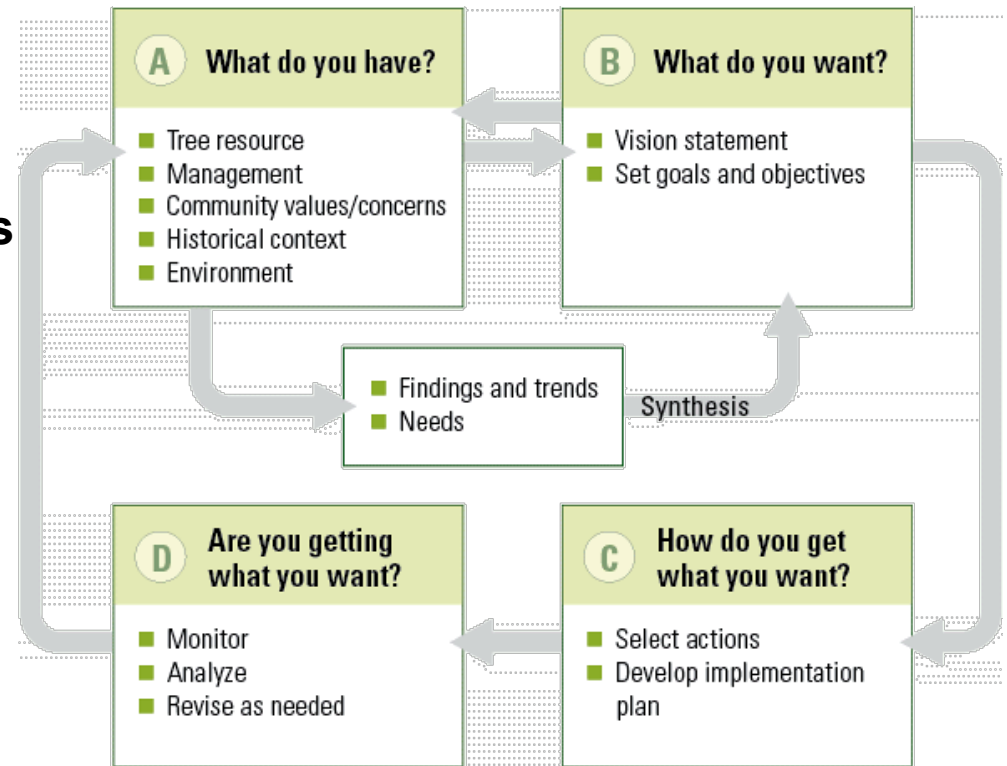
**Economic benefits** of the urban forest

Tree care **standards** and **guidelines**

**Evaluate** and **monitor** populations

Soils and roots

**Choose trees** for the urban forest



**CUF Tree Carbon Calculator**

Developed by the Center for Urban Forest Research  
Pacific Southwest Research Station  
US Forest Service

In partnership with the California Department of  
Forestry and Fire Protection

**Figure 1** **Project Data entry**

Data name	Data entry	Units	Description
Flag1	1		Tree dbh selected
Flag2	1		Shade & climate selected
Climate Zone	2 (South Coast)		South Coast
Electricity CO2 emissions factor§	395	(kg/MWh)	
Electricity CH4 emissions factor§	0.0030	(kg/MWh)	
Electricity N2O emissions factor§	0.0017	(kg/MWh)	
§required for energy project			

**Figures 6 & 8** **Tree and Building Data entry**

Enter Tree data below one tree at a time, then record results

Data name	Data entry	Units	Description
Species code and scientific name	FIMI ( <i>Ficus thoningii</i> )		indian laurel fig
DBH (in)	19	DBH (in)	29.5 ft high
Tree azimuth	1		N
Tree distance class	1		Adj
Building vintage	1		pre-1950
air conditioning equip.	1		Central air/heat pump
Heating equip.	1		natural gas
Heating emissions factor- CO2§	53.1	(kg/MBtu)	
Heating emissions factor CH4§	0.0059	(kg/MBtu)	
Heating emissions factor N2O§	0.0001	(kg/MBtu)	

**Figures 7-10** **Carbon Calculator Results (annual)**

Energy reductions		Emission reductions (CO <sub>2</sub> equivalents)		
Cooling	Heating	Cooling	Heating	Cooling + Heating
kWh/tree	MBtu/tree	(kg/tree)	(kg/tree)	(kg/tree)
<b>65.33</b>	<b>0.165</b>	<b>25.8</b>	<b>8.8</b>	<b>34.7</b>
kWh/tree	GJ/tree	lb/tree	lb/tree	lb/tree
65.33	0.175	57.0	19.4	76.4

## Assist staff with Tree Carbon Calculator

Calculate carbon dioxide sequestration

Build energy savings provided by individual trees

Output: Numerical values for each tree for CO<sub>2</sub> sequestered, energy savings and avoided emissions



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California Urban Forests Council  
wants you to...

invest from the ground up

When we come together to invest in the care of our trees and green spaces, we help create great neighborhoods.

Learn more, get involved and help invest in communities.

Want to invest in Your Community and Your Home?

invest from the ground up

InvestFromTheGroundUp.org

**Homeowners:**  
Did You Know That Trees Increase the value of your home?

**Save you money on your energy bills**

**Improve your health**

**Business Owners:**  
Did You Know That Trees Increase revenue and your business' value?

**Bring in more customers—more frequently**

**Make customers feel better about your goods and services**

**CaUFC**  
CALIFORNIA URBAN FORESTS COUNCIL

**How trees make our lives better**

**Trees make the places we live feel like home**

**Trees reduce noise**

**Trees slow traffic**

**Trees clean the air & the water**

**Trees help your family be healthy**

**Trees help kids do better in school**

**Trees help us save our money**

**SAVE 30-50%**

**TREES CREATE JOBS**

**FOR EVERY \$100 INVESTED IN TREES, 3-4 JOBS ARE CREATED**

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