



SACRAMENTO CITY UNIFIED SCHOOL DISTRICT BOARD OF EDUCATION

Agenda Item# 8.1j

Meeting Date: February 20, 2025

Subject: Approve Memorandum of Understanding Between SCUSD and USDA Forest Service to Evaluate District Urban Forestry Needs and Efforts

- Information Item Only
- Approval on Consent Agenda
- Conference (for discussion only)
- Conference/First Reading (Action Anticipated: _____)
- Conference/Action
- Action
- Public Hearing

Division: Facilities Support Services

Recommendation: Approve the Memorandum of Understanding (MOU) Between SCUSD and USDA Forest Service to Evaluate District Urban Forestry Needs and Efforts.

Background/Rationale: The District has focused on how to increase the amount of tree canopy at school sites in order to provide increase shade, outdoor learning opportunities, and aesthetics. This MOU furthers that purpose by working collaboratively with the Forest Service to evaluate urban tree planting and management efforts, barriers, needs, and cooling benefits at approximately 16 elementary schools within the District, spanning varying levels of socioeconomic status and canopy cover.

Financial Considerations: None.

LCAP Goal(s):

- Goal 2 – Academic Outcomes
- Goal 3 – Welcoming and Safety Outcomes

Documents Attached:

1. Memorandum of Understanding Between Sacramento City Unified School District and USDA Forest Service

Estimated Time of Presentation: NA

Submitted by: Nathaniel Browning, Director, Planning and Property Management

Approved by: Chris Ralston, Assistant Superintendent, Facility Support Services

Janea Marking, Chief Business and Operations Officer

Lisa Allen, Superintendent

**Memorandum of Understanding
Between
Sacramento City Unified School District
And
USDA Forest Service**

Sacramento City Unified School District (“District” or “SCUSD”) and the USDA Forest Service, Pacific Southwest Research Station (“Forest Service” or “PSW”), collectively referred to as “the Parties,” hereby enter into this Memorandum of Understanding (“MOU”) for program services effective on February 21, 2025 (“Effective Date”), with respect to the following recitals.

RECITALS

WHEREAS, District stands as the 12th largest school district in California, encompassing 75 public schools and 7 independent charter schools that serve nearly 40,000 students from very diverse social and economic backgrounds;

WHEREAS, the purpose of this MOU is to pursue and support a collaborative effort between the Parties on evaluating urban tree planting and management efforts, barriers, needs, and cooling benefits at approximately 16 elementary schools (“Schools”), spanning varying levels of socioeconomic status and canopy cover, further outlined in **Exhibit A**, during the term of this MOU;

WHEREAS, evaluation and monitoring activities conducted at the schools will be utilized to inform District in their urban forestry and sustainability efforts as well as inform scholarship, practice, and policy regarding school greening in the State of California and beyond;

WHEREAS, District acknowledges that climate change is a serious threat to humans and that exposure to impacts like extreme heat and the urban heat island effect is uneven, with some populations disproportionately exposed to and unable to avoid risks associated with increased heat, including low-income communities, children, the elderly, disabled, and racially minoritized populations;

WHEREAS, District is rethinking their schoolyards to make them much more climate resilient and better equipped for diverse forms of play and learning, and the District believes that schoolyards are needed to protect students from extreme heat while also nurturing their development and growth;

WHEREAS, District is actively working to garner resources and partnerships to leverage for the possibility of developing an urban forestry master plan for the District;

WHEREAS, Forest Service has Strategic Plan goals to Deliver Benefits to the Public and Apply Knowledge Globally, specifically, to Strengthen Communities (objective E) and Connect People to the Outdoors (objective F);

WHEREAS, Forest Service has scientific expertise in urban forestry and a project (“Project”) to evaluate tree management strategies and cooling benefits, formalized through agreements with the University of California, Los Angeles, and the University of California, Davis, further outlined in **Exhibit B**;

WHEREAS, Project supports the priorities of federal initiatives and investments such as the Forest Service Equity Action Plan (action 9: Expand urban forestry benefits to underserved communities); the Biden-Harris Administration’s Justice40 Initiative; and historic levels of investment in urban and community forestry and disadvantaged communities through the Inflation Reduction Act (\$1.5B nationally to urban forestry programs and tree equity).

WHEREAS, PSW’s charter includes the Humans and Nature priority area, which encompasses resilience of urban and community forests, heat island effects, and informing strategies to address inequities, all of which align with the Project;

WHEREAS, PSW’s charter also stresses a co-production approach among scientists and managers, with collaboration to inform stewardship strategies and adaptive decision-making;

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Roles and Responsibilities

A. Forest Service shall:

- a. Follow the District approval process for Academic Research.
- b. Coordinate the study among the Forest Service scientists, SCUSD staff, and partners.
- c. Communicate preliminary and final findings to SCUSD and their partners.
- d. Conduct Science, Technology, Engineering, Arts, and Math (STEAM) enrichment activities at select SCUSD schools outlined in **Exhibit A**.
- e. Share tree inventory data collected on SCUSD school campuses.

B. District shall:

- a. Provide access to Schools outlined within this MOU, and as outlined hereto.
- b. Provide access to District staff for research purposes.
- c. Review and provide feedback on Forest Service deliverables in a timely manner.
- d. Support STEAM enrichment activities at select SCUSD schools.
- e. Continue to implement urban forest pilot projects already identified within the District at time this MOU is executed.
- f. Continue to pursue funding and support opportunities to further urban forestry master plan efforts across the District.

2. Term and Termination. The term of this MOU shall be from XXX, DATE , 2025, and continue for a term of three years and ending on December 31, 2027 [End Date] (“Term”). Either Party may terminate this MOU without cause and without incurring financial obligation with delivery of a written notice at least thirty (30) days in advance to the other Party at the address below:

If to District:
Sacramento City Unified School District
PO Box 246870
Sacramento CA 95824-6870
Attn: Tina Alvarez Bevens, Contracts

If to Organization:
USDA Forest Service
Pacific Southwest Research Station, G&A
1323 Club Drive
Vallejo, CA 94592
Attn: Jennifer Jones

3. Independent Status. This MOU is by and between independent agents and does not create the relationship of agent, employee, partnership, joint venture and/or association between the independent agents.

4. Fingerprinting Requirements. Organization agrees that any individual it assigns to provide services directly to, or have any contact with, pupil(s) of the District, shall be subject to the fingerprinting/background and TB requirements set forth in the California Education Code. Any individual that Organization assigns to provide services directly to, or have any contact with, pupil(s) of the District shall have undergone the background check required in §45125(b)&(c), including response by DOJ, before any service or contact with pupil(s) of the District is allowed. Forest Service Staff shall go through the District process for all fingerprinting/background and TB requirements.

Pursuant to Education Code §45125.1, Organization shall provide a complete list to the District of all individuals cleared by the DOJ who will provide services under this Agreement (or MOU) and shall certify in writing to the District that Organization has no information that any of the individuals who are required to have their fingerprints submitted to the Department of Justice (DOJ), and who may come in contact with pupils, have been convicted of a “violent or serious felony” as defined in §45122.1 or that they have been advised of any such arrest by the DOJ. Organization shall continuously monitor through DOJ, and obtain subsequent arrest notification from DOJ, regarding any individual whose fingerprints were submitted pursuant to §45125.1 and who is or will be providing service directly to, or has contact with, pupil(s) of the District. Upon receipt of a subsequent arrest notification from DOJ, Organization shall, within 24 hours, notify the District of such arrest notification and prohibit the individual from having any further contact with any pupil(s) of the District until such time as the individual’s arrest has been determined to not involve a “violent or serious felony” as defined in §45122.1 or the notification has been withdrawn by DOJ. If an individual is disqualified from working for the District pursuant to the requirements of the California Education Code, even if only temporarily, Organization agrees to provide a replacement within 15 days of receiving notification that the previous individual has been disqualified.

Organization further agrees and certifies that any individual providing services directly to any pupil(s) of the District whether qualifying as a Mandated Reporter as defined by California Penal Code §11165.7(a), or not, shall be provided annual training on child abuse and mandated reporting of child abuse or neglect utilizing an evidence-based training method which includes training on how to recognize conduct of adults which may trigger reasonable suspicion of abuse of children, i.e., “red-flag” or “grooming” behaviors.

Failure to adhere to the terms of this provision is grounds for termination of the MOU.

5. Mutual Indemnification. Each of the Parties shall defend, indemnify and hold harmless the other Party, its officers, agents and employees from any and all claims, liabilities and costs, for any damages, sickness, death, or injury to person(s) or property, including payment of reasonable attorney’s fees, and including without limitation all consequential damages, from any cause whatsoever, arising directly or indirectly from or connected with the operations or services performed under this MOU, caused in whole or in part by the negligent or intentional acts or omissions of the Parties or its agents, employees or subcontractors.

It is the intention of the Parties, where fault is determined to have been contributory, principles of comparative fault will be followed and each Party shall bear the proportionate cost of any damage attributable to fault of that Party. It is further understood and agreed that such indemnification will survive the termination of this MOU.

6. Insurance. The Federal government does not purchase private insurance to cover potential liability of government employees acting within the scope of employment. This is because it is a long-standing policy of the United States to self-insure its own risk of loss. See, e.g., B-158766, 1977 U.S. Comp. Gen. LEXIS 3075. This policy applies in the context of tort liability as well as to property damage or loss. As a result, the Federal government is generally not permitted to use taxpayer funds to purchase insurance in the absence of express statutory authority.

Under the Federal Tort Claims Act, 28 U.S.C. 2671 §§2671 et seq., the Government may pay claims for injury or property damage resulting from negligence by federal employees. Such claims must be filed within 2 years of sustaining the loss, damage, or injury, and is a simple process of filing a Standard Form 95 (available from multiple sources via an internet search) directly with the USDA.

7. Notices. Any communications affecting the operations covered by this agreement given by the U.S. Forest Service or SCUSD is/are sufficient only if in writing and delivered in person, mailed, or transmitted electronically by e-mail or fax, as follows:

To the U.S. Forest Service Program Manager, at the address specified in the grant/agreement.

To the SCUSD contact, at the SCUSD address shown in the grant/agreement or such other address designated within the grant/agreement.

Notices are effective when delivered in accordance with this provision, or on the effective date of the notice, whichever is later.

8. Information Security. By accepting this agreement, the servicing agency agrees to comply with all Federal information laws, regulations and requirements; and shall be responsible for properly protecting all information used, gathered, or developed as a result of work under this agreement.

If information is stored, developed, or transmitted electronically, the servicing agency shall, upon request, provide to the U.S. Forest Service Information Security staff for review and examination documentation which supports the servicing agency's assertion that adequate information technology (IT) security controls are in place to protect U.S. Forest Service information and data which it holds. Documentation may include, but is not limited to, certification and accreditation documentation, security testing results, audit and assessment results, and risk documentation.

The servicing agency shall notify the U.S. Forest Service Computer Incident Response Team (CIRT), by e-mail, at CIRT@fs.fed.us, within 1 business day of any security incidents which affected or may affect the confidentiality, integrity, or availability of the U.S. Forest Service information and data which it holds, and include an analysis of the extent of the incident and summary of preliminary corrective actions.

9. Use of U.S. Forest Service Insignia. In order for SCUSD to use the U.S. Forest Service insignia on any published media, such as a Web page, printed publication, or audiovisual production, permission must be granted from the U.S. Forest Service's Office of Communications. A written request must be submitted and approval granted in writing by the Office of Communications prior to use of the insignia.
10. Public Notices. It is U.S. Forest Service's policy to inform the public as fully as possible of its programs and activities. SCUSD is/are encouraged to give public notice of the receipt of this agreement and, from time to time, to announce progress and accomplishments. Press releases or other public notices should include a statement substantially as follows:

"Pacific Southwest Research Station of the U.S. Forest Service, Department of Agriculture."

SCUSD may call on U.S. Forest Service's Office of Communication for advice regarding public notices. SCUSD is/are requested to provide copies of notices or announcements to the U.S. Forest Service Program Manager and to U.S. Forest Service's Office Communications as far in advance of release as possible.

11. U.S. Forest Service Acknowledged in Publications, Audiovisuals, and Electronic Media. SCUSD shall acknowledge U.S. Forest Service support in any publications, audiovisuals, and electronic media developed as a result of this MOU.

12. Principal Contacts. Individuals listed below are authorized to act in their respective areas for matters related to this agreement.

Principal Cooperator Contacts:

Cooperator Program Contact	Cooperator Administrative Contact
Name: Nathaniel Browning Address: 425 1 st Avenue City, State, Zip: Sacramento, CA 95818 Telephone: (916) 257-9640 Email: Nathaniel-Browning@scusd.edu	Name: Chris Ralston Address: 425 1 st Avenue City, State, Zip: Sacramento, CA 95818 Telephone: (916) 395-3970 Email: Chris-Ralston@scusd.edu

Principal U.S. Forest Service Contacts:

U.S. Forest Service Program Manager Contact	U.S. Forest Service Administrative Contact
Lara Roman USDA Forest Service Pacific Southwest Research Station 4955 Canyon Crest Drive Riverside, CA 92507 Telephone: (215) 917-8899 Email: lara.roman@usda.gov	Jennifer Jones USDA Forest Service Pacific Southwest Research Station, G&A 1323 Club Drive Vallejo, CA 94592 Telephone: 510-225-5317 Email: jennifer.jones2@usda.gov

13. Entire Agreement. This MOU contains the entire agreement between the parties and supersedes all prior understanding between them with respect to the subject matter of this agreement. There are no promises, terms, conditions or obligations, oral or written, between or among the parties relating to the subject matter of this agreement that are not fully expressed in this MOU. This MOU may not be modified, changed, supplemented or terminated, nor may any obligations under this agreement be waived, except by written instrument signed by the party to be otherwise expressly permitted in this MOU.
14. Nondiscrimination. Any service provided by the parties pursuant to this MOU shall be without discrimination based on the actual or perceived race, religious creed, color, national origin, nationality, immigration status, ethnicity, ethnic group identification, ancestry, age, marital status, pregnancy, physical or mental disability, medical condition, genetic information, gender, gender identity, gender expression, sex, or sexual orientation, in accordance with all applicable Federal and State laws and regulations.
15. Rules and Regulations. All rules and regulations of the District’s Board of Education and all federal, state and local laws, ordinance and regulations are to be strictly observed by the Organization pursuant to this MOU. Any rule, regulation or law required to be contained in this MOU shall be deemed to be incorporated herein.
16. Amendments. The terms of this MOU shall not be amended in any manner except by written agreement signed by the Parties.
17. Execution in Counterparts. This MOU may be executed in counterparts such that the signatures of the parties may appear on separate signature pages. Facsimile or photocopy signatures shall be deemed original signatures for all purposes.

18. Authority. Each party represents that they have the authority to enter into this MOU and that the undersigned are authorized to execute this MOU.

IN WITNESS THEREOF, the Parties have caused this agreement to be executed.

**SACRAMENTO CITY
UNIFIED SCHOOL DISTRICT**

U.S. FOREST SERVICE

By: _____
Janea Marking
Chief Business & Operations Officer

By: _____
Juliann Aukema
Assistant Director, Research
Pacific Southwest Research Station

Date

Date

The authority and format of this instrument has been reviewed and approved for signature.

JENNIFER JONES
U.S. Forest Service Grants & Agreements
Specialist

Date

EXHIBIT A. Additional methods details pertaining to the school selection process.

A given elementary school within SCUSD was deemed eligible for inclusion in our proposed study if it is a:

- 1) non-charter, traditional, public school,
- 2) school that serves grades K-5 or K-6, and
- 3) school that is not co-located with other ineligible schools (e.g., middle schools, charter schools).

There were 40 schools that met these criteria, of which 16 are proposed for the study. The schools selected for the study will be finalized in consultation with SCUSD facilities and sustainability staff as well as external nonprofit partners.

The tables below explain the variables used in the school selection process (A1), the contingency table explaining our four selection classes (A2), descriptive statistics for the core variables used in selection (A3), the initial list of 16 proposed schools for the study (A4), and the full list of schools that met our eligibility criteria (A5). A map of the 16 proposed schools is also included (Figure A1).

Table A1. List of variables included in the school selection process for our study, including a description and source for each variable.

Name	Description	Source
School	Name of school	CDE ² , 2022-2023
Trustee Area	SCUSD Board of Education Trustee Areas	SCUSD ³ , 2023
FRPM	The percent of students eligible for free or reduced-price meals (FRPM) for the 2022-2023 school year, based on household income or categorical eligibility criteria ¹ .	CDE ⁴ , 2022-2023
Canopy	Percentage of canopy cover within the school campus boundary. Layers used include the CA Urban Tree Canopy Cover dataset (2018) and the CA School Campus Database (boundaries) dataset (2021)	USFS ⁵ , 2018; GreenInfo Network, 2021
Temp	Within-school mean of thermal infrared band 10 values from a 2022 July-Sep median composite (in Fahrenheit); measures land surface temperature with a 100-meter resolution, resampled to 30m. Images from Landsat 8	USGS ⁶ , 2022
Past Tree Planting	If a school received a tree planting since 2012: the name of the organization/project.	Information shared or found from the following organizations and partners: CAL FIRE, Sacramento Tree Foundation, Common Vision, Green Schoolyards America.
Current Tree Planting	If a school is currently receiving, or will receive a tree planting in the near future: the name of the organization/project.	Various partners & organizations (see above)

¹ *FRPM Count* definition, on which the percentage was determined: "Of the Enrollment (K-12), a total unduplicated count of students who meet household income or categorical eligibility criteria for **free or reduced-price meals** (FRPM) based on one or more of the following reasons: (1) applying for the National School Lunch Program (NSLP); (2) submitting alternative household income forms; (3) student homeless, migrant, or tribal foster youth statuses in CALPADS; (4) being "directly certified" through CALPADS as participating in California's food stamp or CalWORKs programs or (5) being identified through the weekly CALPADS Foster Matching process or matched by the LEA through the CALPADS online match process as being in Foster Placement, Foster Family Maintenance, or Tribal Foster on Census day. The FRPM Count (K-12) generally corresponds to the "Total Unduplicated Eligible Free/Reduced Meal Counts" provided in CALPADS certification report 1.17: FRPM/English Learner/Foster Youth – Count. This count represents the **official** FRPM Count (K-12) for the academic year."

² California Department of Education (2023). Free or Reduced-Price Meal (Student Poverty) Data, Academic Year 2022-2023. URL: <https://www.cde.ca.gov/ds/ad/filessp.asp>

³ Sacramento City Unified School District (2024). Board of Education Trustee Area Maps. URL: <https://www.scusd.edu/trustee-area-maps>

⁴ California Department of Education (2023). Free or Reduced-Price Meal (Student Poverty) Data. URL: <https://www.cde.ca.gov/ds/ad/filessp.asp>

⁵ USDA Forest Service, EarthDefine, CAL FIRE (2018). Urban Tree Canopy in California. URL: <https://www.fs.usda.gov/detailfull/r5/communityforests/?cid=fseprd647442> ; GreenInfo Network (2021). California School Campus Database. URL: <https://www.californiaschoolcampusdatabase.org/>

⁶ U.S. Geological Survey (2022). Landsat imagery Band 10 TIRS 1.

Table A2. The contingency table depicting the four selection classes in relation to tree planting activities (vs. no activities) and schools with FRPM below the median (vs. above the median). Within each selection class, four schools are picked, and of those four schools, two are relatively low canopy and two are relatively high canopy.

	No Plantings	Recent or Current / Near Future Planting
Low FRPM	Selection Class 1 (7 schools)	Selection Class 2 (13 schools)
High FRPM	Selection Class 3 (7 schools)	Selection Class 4 (13 schools)

Table A3. Distribution of variables influencing school selection: FRPM (%), canopy cover (%) and surface temperature (°F). (n=40 schools)

	Min	Q1	Median	Mean	Q3	Max
FRPM	17.4%	60.2%	82.8%	73.6%	89.5%	96.0%
Canopy	3.1%	9.5%	13.1%	14.2%	17.7%	29.8%
Temp	104.4	108.5	109.9	109.9	111.6	115.5

Table A4. Initial set of 16 selected schools for the tree study.

School	Trustee Area	FRPM	Canopy	Temp	Past Tree Planting	Current Tree Planting
Selection Class 1: FRPM Below Median & No Past or Current Tree Planting						
Sequoia	SC3	76.8%	5.9%	111.2		
Isador Cohen	SC3	81.4%	11.5%	108.5		
Matsuyama	SC6	47.0%	19.5%	108.0		
Bret Harte	SC1	80.6%	23.9%	106.6		
Selection Class 2: FRPM Below Median & Past or Current Tree Planting						
Tahoe	SC2	73.5%	7.6%	109.7	Sacramento Tree Foundation	
William Land	SC1	54.7%	9.5%	110.4	CAL FIRE	
Washington	SC1	53.4%	12.8%	106.4	Sacramento Tree Foundation	
Phoebe A. Hearst	SC2	17.4%	20.6%	106.4	Sacramento Tree Foundation	
Selection Class 3: FRPM Above Median & No Past or Current Tree Planting						
John Bidwell	SC5	84.8%	7.6%	113.2		
Earl Warren	SC4	88.9%	10.0%	108.5		
Father Keith B. Kenny	SC7	95.7%	15.2%	110.8		
John Cabrillo	SC6	88.5%	22.0%	107.6		
Selection Class 4: FRPM Above Median & Past or Current Tree Planting						
John D. Sloat	SC5	89.3%	9.4%	112.5	Sacramento Tree Foundation	EPA Environmental Justice grant
Parkway	SC5	93.3%	10.6%	113.1		Green Schoolyards America Pilot
Leataata Floyd	SC1	95.3%	15.3%	109.7	Sacramento Tree Foundation, Common Vision	
Camellia	SC4	89.6%	16.3%	109.3	Sacramento Tree Foundation	

Figure A1. Map depicting eligible schools (blue circles) and selected schools (red stars) and the 7 trustee areas within SCUSD.

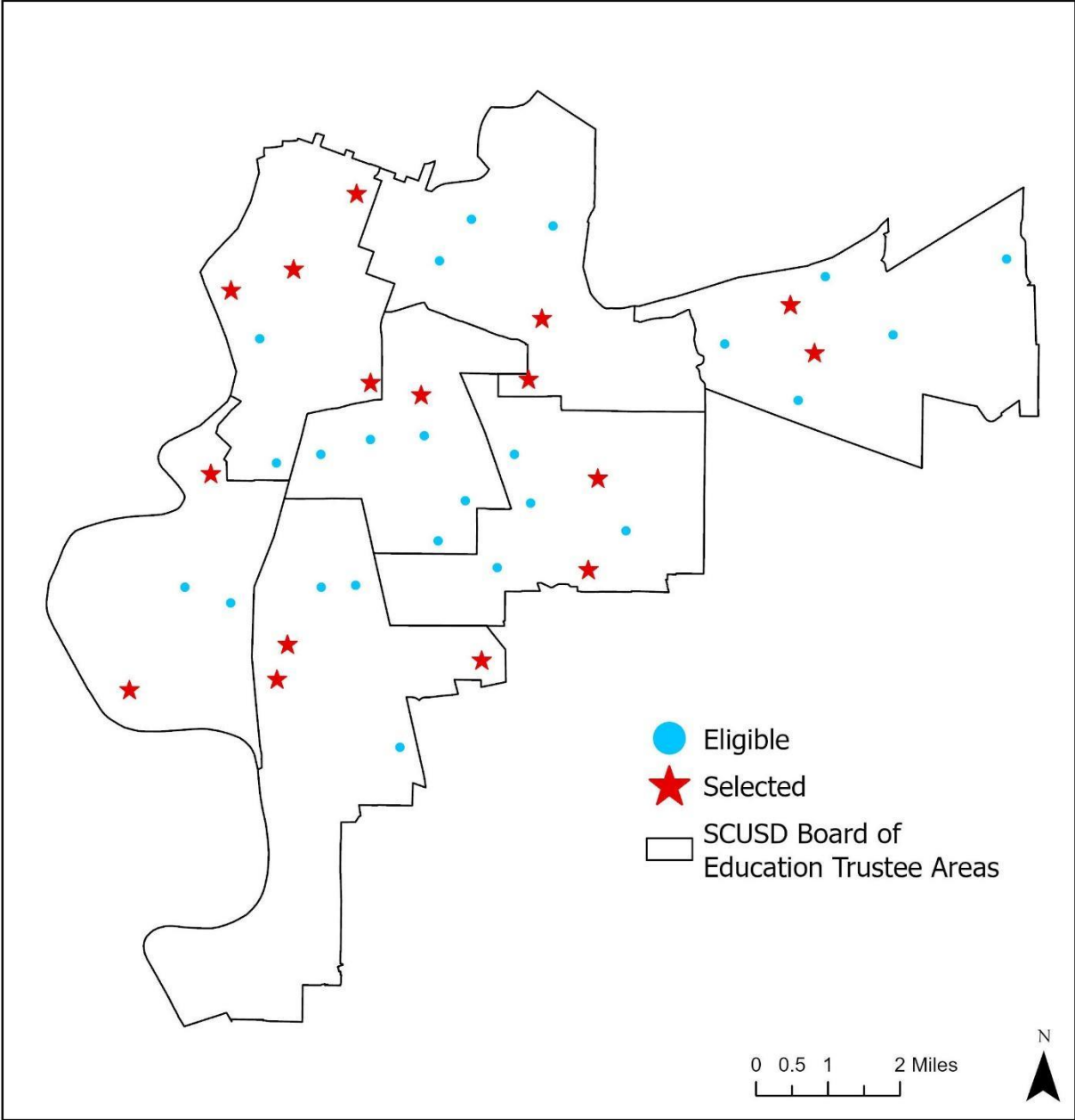


Table A5. Full list of SCUSD eligible elementary schools for our study (n=40). †Schools that District staff recommended that we should not include in this study for various logistical reasons.

School	Trustee Area	FRPM	Canopy	Temp	Past Tree Planting	Current Tree Planting
Selection Class 1: FRPM Below Median & No Past or Current Tree Planting						
Sequoia	SC3	76.8%	5.9%	111.2		
James Marshall	SC3	77.6%	10.1%	110.4		
Isador Cohen	SC3	81.4%	11.5%	108.5		
Golden Empire	SC3	64.8%	12.3%	110.0		
Matsuyama	SC6	47.0%	19.5%	108.0		
Hubert H. Bancroft	SC3	57.1%	22.5%	110.8		
Bret Harte	SC1	80.6%	23.9%	106.6		
Selection Class 2: FRPM Below Median & Past or Current Tree Planting						
Tahoe	SC2	73.5%	7.6%	109.7	Sacramento Tree Foundation	
David Lubin	SC2	44.8%	9.0%	112.4	Sacramento Tree Foundation	
William Land	SC1	54.7%	9.5%	110.4	CAL FIRE	
Susan B. Anthony	SC5	80.3%	12.4%	111.6	Sacramento Tree Foundation	
Caroline Wenzel	SC6	79.6%	12.5%	110.9	Sacramento Tree Foundation	
Washington	SC1	53.4%	12.8%	106.4	Sacramento Tree Foundation	
Sutterville	SC1	32.6%	15.1%	109.3	Sacramento Tree Foundation	
Pony Express	SC6	61.3%	15.3%	109.8	Sacramento Tree Foundation	
Caleb Greenwood	SC2	25.6%	17.7%	106.3	Sacramento Tree Foundation	
Phoebe A. Hearst	SC2	17.4%	20.6%	106.4	Sacramento Tree Foundation	

Table A5 (continued).

School	Trustee Area	FRPM	Canopy	Temp	Past Tree Planting	Current Tree Planting
Crocker/Riverside	SC1	23.3%	24.6%	104.4	Sacramento Tree Foundation	
O. W. Erlewine	SC3	67.7%	25.8%	105.3	Sacramento Tree Foundation	
Theodore Judah	SC2	32.9%	29.8%	105.9	Sacramento Tree Foundation	
Selection Class 3: FRPM Above Median & No Past or Current Tree Planting						
Mark Twain [†]	SC4	85.0%	3.1%	115.5		
H. W. Harkness	SC5	89.5%	6.8%	111.7		
John Bidwell	SC5	84.8%	7.6%	113.2		
Nicholas [†]	SC4	93.1%	9.2%	110.0		
Earl Warren	SC4	88.9%	10.0%	108.5		
Father Keith B. Kenny	SC7	95.7%	15.2%	110.8		
John Cabrillo	SC6	88.5%	22.0%	107.6		
Selection Class 4: FRPM Above Median & Past or Current Tree Planting						
Oak Ridge [†]	SC7	96.0%	8.1%	113.4	Common Vision Planting	
Elder Creek	SC4	87.9%	8.9%	112.5	Sacramento Tree Foundation	
John D. Sloat	SC5	89.3%	9.4%	112.5	Sacramento Tree Foundation	EPA Environmental Justice grant
Woodbine	SC5	91.4%	10.4%	109.5	Sacramento Tree Foundation, CAL FIRE	
Parkway	SC5	93.3%	10.6%	113.1		Green Schoolyards America Pilot
Hollywood Park	SC7	84.1%	13.4%	111.6		Minor Construction (with plantings)

Table A5 (continued).

School	Trustee Area	FRPM	Canopy	Temp	Past Tree Planting	Current Tree Planting
Abraham Lincoln	SC3	86.0%	15.0%	115.4	Sacramento Tree Foundation	
Leataata Floyd	SC1	95.3%	15.3%	109.7	Sacramento Tree Foundation, Common Vision	
Suy:u	SC4	88.9%	15.9%	109.8	Sacramento Tree Foundation	
Ethel I. Baker [‡]	SC7	95.8%	16.0%	108.7	Sacramento Tree Foundation	
Camellia	SC4	89.6%	16.3%	109.3	Sacramento Tree Foundation	
Ethel Phillips	SC7	91.9%	17.7%	108.9		Minor Construction (with plantings)
Pacific [‡]	SC7	95.6%	17.9%	109.9	Sacramento Tree Foundation, Common Vision	

EXHIBIT B

AGREEMENTS BETWEEN USFS AND UNIVERSITY PARTNERS

A. Excerpt from agreement with the University of California, Davis

PSW-UCD Agreement 2023

Challenge Cost Share Agreement

Scope of Work

Title: Evaluating tree cooling performance in California schoolyards

Background:

Schoolyard greening, including tree planting and care, has become a prominent way to incorporate the benefits of vegetation into school landscapes. These benefits include thermal comfort, nature play spaces, and outdoor learning environments. While substantial evidence has emerged about the health and learning benefits of schoolyard greening, and there has been a proliferation of management practices and advocacy to support greening initiatives for school campuses, very little is actually known about the tree resource itself. Specifically, more field-based empirical information is needed about basic characteristics of school campus tree inventories (e.g., species, size class distribution), how recently planting trees are faring, how trees are being managed and maintained, and the magnitude of cooling impacts of trees.

This agreement supports an evaluation of school campus tree canopy and associated urban heat mitigation and thermal comfort. This project relates directly to recent investments from the USDA Forest Service State & Private Forestry, Urban & Community Forestry program into urban forestry, as well as investments from the California Department of Forestry and Fire Protection (CAL FIRE) for public K-12 schoolyard tree planting and planning. Schools will be selected in consultation with partners, and will include schools in underserved neighborhoods, as well as schools that have recently planted trees. Improved understanding of campus tree resources will inform landscape design and tree management regimes for the FS and its partner organizations.

Objectives:

1. Oversee installation of temperature and humidity sensors at selected schools

2. Analyze thermal comfort and heat mitigation in relation to tree canopy in schoolyards

3. Assess policies and management approaches related to schoolyard trees

4. Support K-12 student engagement around schoolyard trees

Tasks:

1. Contribute to overall project planning in collaboration with USDA Forest Service scientists, CAL FIRE staff, and other partners. This includes developing criteria for school selection and refining data collection strategies. (2024-2025)

2. Install sensors for temperature measurements at selected schools to assess urban heat island mitigation from tree canopy. (2025)

3. Summarize and analyze temperature-tree relationships. (2026-2027)

4. Assess state and local policies and management approaches related to schoolyard trees, such as tree management systems at the school district level (2025-2027)

5. Implement a STEM enrichment activity for a public K-12 school on topics such as urban forestry, arboriculture, urban heat islands, and/or schoolyard landscape design. (2025-2027)

Deliverables:

Deliverables include, but are not limited to, reports and presentations of findings to Forest Service scientists, as well as state, regional, and national partners.

Budget justification:

The budget will primarily be used for 1) an evaluation specialist (post-doc) to investigate temperature and humidity at selected schools, 2) masters students to help evaluate policies and programs around schoolyard greening, 3) travel funds for field work, school site visits, and meetings, and 4) supplies and printing.

B. Excerpt from agreement with University of California, Los Angeles

PSW-UCLA Agreement 2023

Challenge Cost Share Agreement

Scope of Work

Title: Evaluating urban forest management strategies in California schoolyards

Background:

Schoolyard greening, including tree planting and care, has become a prominent way to incorporate the benefits of vegetation into school landscapes. These benefits include thermal comfort, nature play spaces, and outdoor learning environments. While substantial evidence has emerged about the health and learning benefits of schoolyard greening, and there has been a proliferation of management practices and advocacy to support greening initiatives for school campuses, very little is actually known about the tree resource itself. Specifically, more field-based empirical information is needed about basic characteristics of school campus tree inventories (e.g., species, size class distribution), how recently planting trees are faring, and how trees are being managed and maintained.

This agreement supports data collection for school campus tree inventories in selected southern California school districts, as well as an evaluation of school campus tree management and maintenance. This project relates directly to recent investments from the US Forest Service State & Private Forestry, Urban & Community Forestry program into urban forestry, as well as investments from the California Department of Forestry and Fire Protection (CAL FIRE) for public K-12 schoolyard tree planting and planning. Schools will be selected in consultation with partners, and will include schools in underserved neighborhoods, as well as schools that have recently planted trees. Improved understanding of campus tree resources will inform landscape design and tree management regimes for the FS and its partner organizations.

Objectives:

1. Characterize schoolyard trees in selected southern California school districts
2. Monitor schoolyard trees from recent plantings (e.g., CAL FIRE plantings)
3. Evaluate school campus tree management and maintenance strategies and barriers

4. Develop and implement K-12 student engagement around schoolyard trees

Tasks:

1. Contribute to overall project planning in collaboration with USDA Forest Service scientists, CAL FIRE staff, and other partners. This includes developing criteria for school selection and refining data collection strategies. (2024-2025)

2. Assess tree management and maintenance strategies and challenges at different schools, including perspectives of different staff and stakeholders (e.g., teachers, grounds crews, principal, parents). (2024-2025)

3. Carry out school campus tree inventories, recording information such as each tree's location, species, trunk size, crown vigor, following established protocols developed by the Forest Service. (2025)

4. Support temperature measurements at selected schools to assess urban heat island mitigation from tree canopy. (2025)

5. Summarize and analyze tree inventory data, characterizing school tree resources in terms of taxonomic diversity, size structure, and health. (2026-2027)

6. Implement a STEM enrichment activity for a public K-12 school on topics such as urban forestry, arboriculture, urban heat islands, and/or schoolyard landscape design. (2025-2027)

Deliverables:

Deliverables include, but are not limited to, reports and presentations of findings to Forest Service scientists, as well as state, regional, and national partners.

Budget justification:

The budget will primarily be used for 1) field crews for summer field work, 2) an evaluation specialist (post-doc) to assess tree management and maintenance strategies, 3) student assistants to help implement school enrichment activities, 4) travel funds for field work, school site visits, and meetings, and 5) supplies (including laptop for post-doc and iPad for data collection).

