Date of Hearing: April 27, 2022

ASSEMBLY COMMITTEE ON EDUCATION
Patrick O'Donnell, Chair
AB 2566 (Calderon) – As Amended April 19, 2022

[This bill was double referred from the Assembly Natural Resources Committee and was heard by that Committee as it relates to issues under its jurisdiction.]

SUBJECT: Urban forestry: school greening projects

SUMMARY: Requires, on or before July 1, 2023, the Secretary of the Natural Resources Agency and the Department of Forestry and Fire Protection (CAL FIRE) to develop a competitive grant process for supporting school greening at local educational agencies (LEAs). Specifically, **this bill**:

1) Requires, on or before July 1, 2023, the Secretary of the Natural Resources Agency and CAL FIRE to develop a competitive grant process for supporting school greening, which includes guidelines and selection criteria.

2) Requires that funds allocated to CAL FIRE for the explicit purposes of supporting school greening be administered, in collaboration with the Secretary of the Natural Resources Agency, to provide grants to eligible cities, counties, districts, including special districts, LEAs, and nonprofit organizations through a competitive grant process.

3) States that not less than 60% of the school greening features supported by a grant shall occur within areas on a schoolsite of a LEA used by pupils, including, but not limited to, for recreation, recess, lunch, or instruction outdoors.

4) States that before developing the grant process the Secretary of the Natural Resources Agency and CAL FIRE shall each separately hold at least one public hearing to gather public input on the grant process development.

5) Requires the guidelines established for this grant program to include all of the following:

    a) Applications shall, within the application, specify the exact project to be completed;

    b) Applicants shall obtain a memorandum of understanding from the LEA supporting the project before being awarded a grant;

    c) Awarded grants shall be subject to state auditing and reporting requirements;

    d) Grantees shall maintain and operate the project developed pursuant to the grant for a period of no less than five years;

    e) Grant funds may be used to support costs related to the project that include, but are not limited to, planning, permitting, design, and soil testing;

f) Grant funds shall be available to support indirect costs not to exceed 12 percent of the total grant;
g) Awarded projects shall comply with the Model Water Efficient Landscape Ordinance or the local agency landscape water ordinance and shall use drought tolerant plantings; and

h) Grant funds shall be available to projects to convert paved areas to green spaces.

6) Requires any moneys appropriated by the Legislature in the annual Budget Act to be transferred to the School Greening and Resiliency Fund, which is established in the State Treasury.

7) Defines the following terms:

a) Eligible project means any project or action identified in Section 4799.12 and can feasibly be completed on the schoolsite of a local educational agency.

b) In-need education facility means a school site of a LEA in which either of the following apply:

i. A schoolsite located in a disadvantaged community, as defined in Section 39711 of the Health and Safety Code, or a low-income community, as defined in paragraph (2) of subdivision (d) of Section 39713 of the Health and Safety Code.

ii. A schoolsite in which 70% or more of the pupils are eligible for free or reduced-price meals.

c) Local educational agency means a school district, county office of education, or charter school that maintains a kindergarten or any of the grades 1 to 12, inclusive.

d) School greening means any eligible project located within the property boundaries of a schoolsite of a LEA that reduces the ambient temperature by supporting the urban forest.

e) Secretary means the Secretary of the Natural Resources Agency.

EXISTING LAW:

1) Requires the governing board of any school district to meet with appropriate local government recreation and park authorities to review all possible methods of coordinating planning, design, and construction of new school facilities and schoolsites or major additions to existing school facilities and recreation and park facilities in the community. (Education Code (EC) Section 35275)

2) Makes findings and declarations that school gardens provide an interactive, hands-on learning environment in which pupils learn composting and waste management techniques, fundamental concepts about nutrition and obesity prevention, and the cultural and historical aspects of our food supply. School gardens also foster a better understanding and appreciation of where food comes from, how food travels from the farm to the table, and the important role of agriculture in the state, national, and global economy. (EC Section 51795)

3) Establishes the Instructional School Gardens Program, administered by the CDE for the promotion, creation, and support of instructional school gardens through the allocation of grants, and through technical assistance provided, to school districts, charter schools, or county offices of education. (EC Section 51796)

4) Prohibits a local governing board from siting a school located on land that was previously a hazardous waste disposal site, that contains pipelines that carry hazardous substances, or that is near an airport runway or freeway, other busy traffic corridors and railyards that have the potential to expose students and school staff to hazardous air emissions. (EC Sections 17213 and 17215)

5) Requires the California Environmental Protection Agency (CalEPA) to identify disadvantaged communities for investment opportunities. Requires these communities to be identified based on geographic, socioeconomic, public health, and environmental hazard criteria, and may include, but are not limited to, either of the following:

   a) Areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation.

   b) Areas with concentrations of people that are of low income, high unemployment, low levels of homeownership, high rent burden, sensitive populations, or low levels of educational attainment. (Health and Safety Code Section 39711)

FISCAL EFFECT: Unknown

COMMENTS:

What does this bill do? This bill creates a competitive grant program at the CAL FIRE for school districts, COEs and charter schools to plant trees and other vegetation on school grounds to replace paved areas. The bill authorizes school districts, COEs and charter schools to apply on behalf of school sites with high concentrations of student poverty and schoolsites with less tree cover. The bill further requires a majority of vegetation planted to be in areas of the school campus utilized by students.

Need for the bill. According to the author, "California continues to experience record-breaking temperatures, with escalating heat waves occurring more frequently. Extreme heat particularly impacts low-income communities and people of color who already suffer from a lack of tree canopy or park space and higher exposure to pollution. Children who attend schools in urban areas that are built with heat-retaining materials and without green space are at greater risk of suffering from skin cancer, asthma, and obesity. AB 2566 establishes school greening grants for K-12 public schools located in disadvantaged or low-income communities. This program will transform schools paved by asphalt into green landscapes, which will reduce heat-island effects and benefit overall student health."

Urban Forestry. An urban forest is comprised of trees and other vegetation in and around our communities, including the trees in our yards and along residential streets, in parking lots and along commercial thoroughfares, on school grounds and in parks and open spaces. Trees provide energy conservation, reduce urban heat island effects, reduce storm-water runoff, improve local air quality, support public and mental health benefits, provide wildlife habitat, and increase property values. Trees are critical to the quality of life in our urban environments. Climate

change, pollution, drought, arboreal disease, and other factors strain our urban forests. Extreme weather and emerging tree pests such as the Polyphagous Shot Hole Borer and Kuroshio Shot Hole Borer threaten the gains California has made in increasing the urban canopy. Investments in maintaining and protecting our current urban forests and developing new urban forests can help combat those threats and further the state's goals for urban forestry.

Greener schools. The majority of the state's urban schools are covered in hard surfaces, particularly in neighborhoods that already suffering from park scarcity. Play spaces are covered in asphalt and concrete, which contribute to the urban heat island effect. Green space, such as grass, trees, and shrubs, which have been shown to cool is linked to improved child development outcomes. In addition to reducing heat, spending time in green spaces has been shown to improve student's academic achievement, improve concentration, and reduce stress. Greenery near schools has also been shown to improve air quality.

Benefits of green space in areas with pollution. According to the National Parks Service, "Poor air quality is a common problem in many urban areas. It can lead to decreased human health, damage to landscape materials and ecosystem processes, and spoiled scenic views due to reduced visibility….Trees can improve air quality through a number of means, including by (1) reducing air temperature thus altering pollution concentrations, (2) reducing energy consumption in buildings, which consequently reduces air pollutant emissions from the power sources, and most notably, (3) directly removing pollutants from the air. Urban forests can remove multiple tons of ozone, gaseous air pollution, and particulate matter each year either through direct uptake of gasses or temporarily intercepting airborne particles. The combined positive impacts of an urban forest lead to a net reduction in urban ozone formation, according to multiple studies from the USDA Forest Service."

Environmental health scientists promote the use of green environments to improve air quality and public health. According to the University of Washington's Green Cities: Good Health website, "vegetation and trees, in particular, can act as natural filters for both gases and particulate matter in urban environments."

According to a study published in the Journal of Epidemiol Community Health, *Children living in areas with more street trees have lower prevalence of asthma,* "Areas with more street trees experienced a lower prevalence of early childhood asthma. This association was stronger after adjusting for potential confounders such as population density and proximity to sources of air pollution." (Lovasi, 2008)

How do trees remove air pollution? According to the National Parks Service, "Trees absorb gaseous molecules in the air. Tiny pores on tree leaf surfaces called stomata take in air that includes toxic pollutants. Once inside the leaf, the gases diffuse into intercellular spaces and may react with inner-leaf surfaces. This means pollutants like Sulphur dioxide (SO2), nitrogen dioxide (NO2), carbon monoxide (CO), and ozone are permanently converted when inside the leaf. However, studies have found that ground-level ozone significantly reduces tree growth, injures the foliage, and predisposes trees to insect and disease attack.

Trees can remove particulate matter by "catching" them temporarily. Fine particulate matter is deposited on tree surfaces clinging to leaves and stems instead of floating about in the air. Most PM2.5 will only remain on surfaces. With rain or precipitation, the particulates can be dissolved in the stormwater runoff or transferred to the soil. Particulates can also be resuspended or re-

enter the atmosphere, making the tree only a temporary retention site for many atmospheric particles."

School garden programs. Existing law encourages schools to establish school garden programs. In 1995, the CDE launched the Garden in Every School initiative and collaborates with entities that support school gardens, including public and private agricultural agencies, waste management agencies, health agencies and others.

In 2006, AB 1535 (Nunez), Chapter 427, Statutes of 2006, provided $15 million for a grant program administered by the State Superintendent of Public Instruction. Kindergarten through grade 8 schoolsites were eligible to receive a maximum of $2,500 and high schools were eligible to receive a maximum of $5,000. Funds were used for instructional school garden equipment or supplies and professional development for teachers, garden volunteers and food service staff. According to the CDE, approximately 3,500 schoolsites received grants.

Existing law also requires a local governing board to evaluate methods for coordinating and planning new schoolsites and parks in the community. Many new schools are now constructed adjacent to a city park.

Arguments in support. Tree people states, "We believe trees and related green infrastructure are the most effective nature-based solutions in addressing climate threats. School greening projects will help meet water capture goals and provide much needed and continued investment in the safety, wellbeing and overall health of students and families. Ultimately, these investments will lead to resilient, sustainable school campuses and communities in the face of climate change by directly combating extreme heat through strategic shade tree planting, heat-absorbing asphalt removal, and other proven mechanisms that reduce the ambient temperature. School greening grants will promote the most effective ways each campus and surrounding neighborhood can adapt to the effects of climate change, and determine the most impactful nature-based solutions."

Recommended Committee Amendment. Staff recommends the bill be amended to:

1) Specify that grant funds are for work to be completed on that local educational agency's property.

2) Specify that charter schools with facilities built with state bond funds be eligible for this grant program, to ensure that grant funds are utilized on property owned by a charter school.

Related legislation. AB 2114 (Kalra) of the 2021-22 Session would establish the California Pocket Forest Initiative at CAL FIRE.

SB 989 (Hertzberg) of the 2021-22 Session, would establish the Climate Change Preparedness, Resiliency, and Jobs for Communities Program, to be administered by the Strategic Growth Council.

AB 1578 (L. Rivas) of the 2019-20 Session would have established the School Pavement to Parks Grant Program within the Department of Education to assist schools located in disadvantaged communities to convert existing pavement to green space. This bill was vetoed by the Governor, who stated,

> While I support an integrated and cohesive effort to make parks and greenspaces accessible to all throughout our State, and to that end signed Assembly Bill 209, I cannot support the creation of these stand-alone grant programs.

AB 209 (Limón), Chapter 675, Statues of 2019, established the Outdoor Equity Grants Program, which provides funding to allow underserved and at-risk populations to participate in outdoor environmental education experiences at state parks and other public lands.

AB 1530 (Gonzalez Fletcher) Chapter 720, Statutes of 2017, required the CAL FIRE to update the California Urban Forestry Act to reflect its current funding mix, establish local or regional targets for urban tree canopy, and provide more focus on the maintenance of urban forests.

AB 2367 (Bonilla), Chapter 428, Statutes of 2012, authorized a school district, charter school, or COE to sell produce grown in a school garden.

AB 2045 (De La Torre) Chapter 438, Statutes of 2008, incorporated into the CAL FIRE urban forestry program the climate change mitigation benefits of urban forests and it also explicitly authorizes projects that create multiple benefits, such as projects that combine tree planting and management with greenhouse gas emission reductions, improvements to air and water quality, and stormwater management, among others.

AB 1535 (Núñez), Chapter 437, Statutes of 2006, provided $15 million for grants to school districts, COEs and charter schools for the development of instructional school gardens.

REGISTERED SUPPORT / OPPOSITION:

Support

Amigos De Los Rios
Angelenos for Trees
Arborpro
Association for Environmental and Outdoor Education
Bay Area Urban Forest Ecosystem Council
California Forestry Association
California Greenworks
California Releaf
California Urban Forests Council
Canopy
Center for Climate Change and Health
Center for Regenerative Agriculture, Csu Chico
Central Coast Urban Forests Council
Climate Action Now
Community Forest Advisory Committee
Community Foundation for Monterey County
Davey Resource Group
Fallbrook Land Conservancy
Forever Balboa Park
Green Schoolyards America
Growing Together

Inland Urban Forest Council
International Society of Arboriculture Western Chapter
Koreatown Youth + Community Center
Latino Outdoors
Los Angeles Beautification Team
Los Angeles Neighborhood Land Trust
Lumber Cycle
North East Trees
Our City Forests
Regional Urban Forest Council
Sacramento Tree Foundation
Sacramento Urban Forest Council
San Diego Regional Urban Forests Council
San Joaquin Urban Forest Council
Sustainable Claremont
Ten Strands
The Wildwoods Foundation
Tree Fresno
Tree Partners Foundation
Tree People
Tree People Land Trust
Trust for Public Land
Your Children's Trees

Opposition

None on file

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