

South Coast Air Quality Management District (South Coast AQMD)

Assembly Bill 617 (AB 617) South Los Angeles (SLA)

Draft Green Spaces Project Plan

Project Identification and Background

Assembly Bill 617

Assembly Bill 617 (AB 617) was approved in 2017 and addresses the disproportionate impacts of air pollution in environmental justice communities. The California Air Resources Board (CARB) has designated six (6) AB 617 communities within the South Coast Air Quality Management District (South Coast AQMD) to develop both a Community Emission Reductions Plan (CERP) and a Community Air Monitoring Plan (CAMP). Each CERP and CAMP is developed under the guidance of a Community Steering Committee (CSC) which is a group of stakeholders comprised of active residents, representatives of community-based organizations, universities, government agencies, businesses, and others. As part of CERP development, each CSC identifies their community's top air quality priorities and helps develop actions to address them.

Assembly Bill 617 Community of South Los Angeles

On February 25, 2021, South Los Angeles (SLA) was designated as an AB 617 community.¹ The SLA community established an approximately 48-member CSC who collaborated with South Coast AQMD to develop the SLA CERP.² As of July 1, 2026, there are 75 SLA CSC members, with 56 community residents and 19 representatives from partnering organizations.³ The South Coast AQMD Governing Board adopted the SLA CERP on June 3, 2022 and CARB approved the SLA CERP on August 25, 2022.⁴ The SLA CSC identified five air quality priorities: 1) mobile sources, 2) auto body shops, 3) general industrial facilities, 4) metal processing facilities, and 5) oil and gas industry and included CERP actions to address these air quality priorities.

The SLA CERP does not include a standalone green spaces objective. This project proceeds under SLA CERP Mobile Sources Objective B – Reduce Exposure at Schools (SLA-5b-01B), which includes the action to “Work with local school districts and CSC to support community projects that reduce students’ exposure to air pollution.” Green space projects, including new parks, expansion or renovation of existing parks and recreational areas, and vegetative features support this objective by creating or enhancing green space infrastructure that can reduce students’ exposure to air pollution in areas where they live, attend school, and travel to and from school. Therefore, eligibility is scoped to areas serving this population, specifically school attendance zones within the SLA community boundary. CARB confirmed during the SLA Participatory Budgeting process that a green spaces project may proceed under Objective B and that eligible projects do not need to be located on school grounds but must fall within school attendance zones within the SLA community boundary. This CERP nexus and the school attendance zone geographic constraint are reflected throughout this Plan.

Community Air Protection (CAP) Incentives Program Funding

As part of the AB 617 Program, South Coast AQMD designated CAP Incentives funding to help implement CERP actions. Some of the money provided for CAP Incentives funding are appropriated through California Climate Investments. California Climate Investments is a statewide initiative which distributes Cap-and-Trade

¹California Air Resources Board, February 19, 2021 Item #21-1-8 Board Item Summary. Available at:

https://ww2.arb.ca.gov/sites/default/files/barcu/board/books/2021/022521/21-1-8bis.pdf?gl=1*o0upmj*ga*MTY1MDk2Nzk4MC4xNzQxODIxOTQ1*ga7M1ZZPXDBL*cze3ODY1NDg2MzlkzbEwNiRnMSR0MTc4NjU0ODczMSRqNDMkbDAkaDA. Accessed July 2026.

²South Coast AQMD South Los Angeles Community Emission Reductions Plan. Available at: https://www.aqmd.gov/docs/default-source/ab-617-ab-134/steering-committees/south-la/final-cerp.pdf?sfvrsn=7a5fa261_18. Accessed July 2026.

³South Coast AQMD South Los Angeles Community Webpage, Community Steering Committee Roster. Available at: [updated-south-la-roster-4-22-2650926dbf-f278-48da-8e36-dd73294bac24.pdf](https://www.aqmd.gov/docs/default-source/ab-617-ab-134/steering-committees/south-la/final-cerp.pdf?sfvrsn=7a5fa261_18).

⁴California Air Resources Board, August 25, 2022, Item #22-10-2. Available at: <https://ww2.arb.ca.gov/sites/default/files/barcu/board/books/2022/082522/22-10-2bis.pdf>. Accessed July 2026.

auction proceeds from the Greenhouse Gas Reduction Fund (GGRF) to help address climate change and improve public health and the environment, particularly in environmental justice communities. CAP Incentives funds can be applied towards mobile source, stationary source, and community-identified projects to reduce emissions and/or community air pollution exposure. A community-identified project is an action or set of actions in an adopted CERP that have been prioritized by the CSC to receive CAP Incentives funding to support their implementation. South Coast AQMD designated \$11.2 million in Year 5 CAP Incentives funds for use towards community-identified projects in SLA.

Through a Participatory Budgeting process, the SLA CSC identified green space projects under Mobile Sources Objective B – Reduce Exposure at Schools as one of their community-identified projects. Green space projects are eligible to receive GGRF appropriations through the Urban and Community Forestry⁵ and Urban Greening Programs⁶ of California Climate Investments. The primary focus of the Urban Greening Program is the sequestration of carbon dioxide, a greenhouse gas. Greenhouse gases trap heat in Earth's atmosphere; in addition to carbon dioxide, major greenhouse gases include methane, nitrous oxide (NO_x), and fluorinated gases (e.g., hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs)). Additionally, planting of trees and other vegetation can provide co-benefits such as the reduction in exposure to air pollutants such as ground-level ozone, NO_x, and particulate matter (PM). Infrastructure associated with green spaces (e.g., bikeways, walking paths, etc.) can also provide other benefits such as providing shade or encouraging physical activity, which have the potential to improve both mental and physical health. To utilize CAP Incentives funds for this community-identified project, a Project Plan, herein referred to as the “Plan,” is required in accordance with CARB’s 2025 CAP Incentives Program Guidelines.⁷

Community Support

SLA CSC

The SLA CSC and South Coast AQMD hold distinct but complementary roles in the development and implementation of this Plan. The SLA CSC acts as the community’s decision-making body for CERP and CAMP content, including the Participatory Budgeting process described below, and provides ongoing input on project scope, eligibility, and scoring preferences. South Coast AQMD is the agency responsible for administering AB 617 activities and developing this Plan consistent with CSC priorities, implementing the resulting program, and reporting on its progress to the CSC and CARB.

To address the green spaces community-identified project, the SLA CSC established support for this project through the Participatory Budgeting process and includes the following SLA CERP objective:

- Mobile Sources Objective B: Work with local school districts and CSC to support community projects that reduce students’ exposure to air pollution (SLA CERP Chapter 5b)⁸

Implementation of the SLA CERP began June 2022; South Coast AQMD meets with the SLA CSC quarterly to discuss CERP implementation and tracking. As part of CERP implementation, South Coast AQMD conducted Participatory Budgeting meetings with the SLA CSC to allow for a CSC-led process for the distribution of the Year 5 CAP Incentives funds. Between October 2023 and October 2024, multiple workshops were conducted

⁵ California Climate Investments Urban and Community Forestry Program. Available at: <https://www.caclimateinvestments.ca.gov/urban-forestry>, Accessed July 2026.

⁶ California Climate Investments Urban Greening Program. Available at: <https://www.caclimateinvestments.ca.gov/urban-greening>, Accessed July 2026.

⁷ California Air Resources Board, 2025 Community Air Protection (CAP) Incentives Program Guidelines. Available at: https://ww2.arb.ca.gov/sites/default/files/2025-08/FINAL_DRAFT_CAP_Incentives_2024_Guidelines_revised_May_2025_ADA_TOC.pdf. Accessed July 2026.

⁸ South Los Angeles Community Emission Reductions Plan, Chapter 5b. Available at: <https://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2022/2022-June3-027.pdf?sfvrsn=6#page=153>

to prioritize community-identified projects and allocate the funding for each project. South Coast AQMD presented information on eligible project types from objectives in the CERP, including the average cost based on similar projects, expected emission reductions, and the difficulty of implementing those projects. To gather CSC input for community-identified projects, South Coast AQMD conducted activities to identify the CSC's top priorities for community-identified projects and to determine the distribution of Year 5 CAP Incentives funds to each project type. The activities resulted in the SLA CSC prioritizing projects involving dry cleaning equipment replacement, residential and public school air filtration systems, green space projects, and an auto body shops project. A funding proposal was presented focused on the distribution of the designated CAP Incentives funds, resulting in the SLA CSC allocating \$3 million to green space projects.

Following the Participatory Budgeting process, through CSC and Community Air Monitoring Working Team Meetings, the SLA CSC confirmed support in green space projects within school attendance zones in the SLA community and expressed interest in participating in outreach to inform the community about the program once it is ready to accept applications.

This Plan will prioritize new parks and the expansion or renovation of existing parks as well as other recreational areas (e.g., bikeways, green belts, pathways, etc.) within school attendance zones in the SLA community, consistent with the planning baseline established under the CARB-approved Southeast Los Angeles (SELA) GSPP. In addition, as requested by the SLA CSC, eligible green space projects may also incorporate a community garden component in which a portion of the project site is set aside for use by community members to grow plants of their choosing. The prioritization of green space projects will be reflected in the application scoring criteria and further informed by the SLA CSC's input as projects are selected. Additional feedback included suggestions on outreach strategies and Project Life duration (described in Project Implementation and Project Life).

Mechanism for Informing the Community

South Coast AQMD has held meetings and maintained email correspondence with SLA CSC members to inform them of potential green space projects, solicit feedback, and provide updates on the status on the development of this Plan. South Coast AQMD will continue to provide updates as they become available, including CARB approval of the Plan and the release of the request for proposals (RFP). South Coast AQMD will also provide updates throughout the solicitation process and SLA CSC members will be given an opportunity to review and provide input on proposed green space projects. Outreach on these updates will be provided to the SLA CSC through a minimum of one the following methods:

- Emails
- Social media
- CSC meetings
- South Coast AQMD website
- Other suggestions by the SLA CSC and community co-lead Watts Clean Air and Energy Committee

In addition to the methods above, CSC members will also be provided updates on the status of green space projects implementation through South Coast AQMD's AB 617 Annual Progress Reports. Further, as Los Angeles County and other municipalities within SLA may have green space goals and projects that align with this Plan, South Coast AQMD will collaborate with and notify these entities regarding the RFP.

Exposure Reductions and Associated Benefits

Exposure Reductions

Green spaces can help reduce exposure to air pollution. The primary method of exposure reduction to pollutants such as ozone, NO_x, and PM from trees and shrubs is through direct absorption and uptake via

the stomata (pores found on the outer layer of plants, particularly leaves) or filtration by plant surfaces.⁹ They can also lower exposure to air pollutants by providing shade which lowers temperatures and blocks sunlight thus decreasing the potential for reactions to form secondary air pollutants such as ozone.¹⁰

Nitrogen oxides and volatile organic compounds (VOCs) are ozone precursors as they chemically react in the presence of sunlight to form ground-level ozone.¹¹ Trees and other vegetation can reduce exposure to air pollution through filtration, deposition, shading, cooling, and separation from pollution sources. Vegetation can also help limit ozone formation by sequestering these precursors through absorption and filtration.

Ozone is linked to a variety of respiratory conditions including coughing, chest pain, and can worsen asthma symptoms.¹² Exposure to NOx can increase susceptibility to respiratory infections and diseases, including asthma.¹³

Particulate matter (PM) refers to a mixture of atmospheric particles and liquid droplets whose diameters are 10 or 2.5 micrometers or less (PM10 and PM2.5, respectively); they can be composed of a variety of particles such as metals, elemental carbon, and dust. Particulate matter can be emitted directly from industrial processes (e.g., power plants, metal processing facilities) and natural sources (e.g., windblown dust, wildfires, etc.)¹⁴ or can be formed through atmospheric chemical reactions between other pollutants (e.g., NOx and sulfur dioxides).¹⁵ Exposure to PM10 is associated with respiratory diseases such as asthma and chronic obstructive pulmonary disease; while PM2.5 can impair lung development in children and lead to premature death especially for those with chronic lung and cardiovascular diseases.¹⁶

Diesel particulate matter (DPM) is a form of particulate matter produced and is released into the atmosphere from the combustion of diesel fuel, such as from heavy-duty trucks.¹⁷ Exposure to DPM is linked to lung cancer, and non-cancerous health impacts including respiratory illnesses, such as asthma, heart disease, and premature death.¹⁸ Diesel particulate matter is the largest contributor to overall air toxics cancer risk in the South Coast Air Basin.¹⁹

Additional Benefits

In addition to reductions in exposure to ozone, NOx, and PM, increasing green spaces can benefit the community by improving community members' access to recreational opportunities. Residents living near or with access to green spaces and/or infrastructure such as bike and walking paths may feel encouraged to

⁹ D. Nowak. Environmental Pollution 119 (2014) 119-129. <https://doi.org/10.1016/j.envpol.2014.05.028>. Accessed July 2026.

¹⁰ D. Nowak. Air Quality Effects of Urban Trees and Parks (2010). National Recreation and Parks Association Research Series Monograph. Available at: https://www.fs.usda.gov/nrs/pubs/jrnl/2010/nrs_2010_nowak_002.pdf. Accessed July 2026.

¹¹ U.S. EPA. Ground-level Ozone Pollution. Available at: <https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics>. Accessed July 2026.

¹² U.S. EPA. Health Effects of Ozone Pollution. Available at: <https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution>. Accessed July 2026.

¹³ U.S. EPA. Basic Information about NO2. Available at: <https://www.epa.gov/no2-pollution/basic-information-about-no2>. Accessed July 2026.

¹⁴ San Joaquin Valley Air Pollution Control District. Particulate Matter (PM) Sources. Available at: <https://ww2.valleyair.org/rules-and-planning/air-quality-plans/particulate-matter-plans/particulate-matter-pm-sources/>. Accessed July 2026.

¹⁵ U.S. EPA. Particulate Matter (PM) Basics. Available at: <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM>. Accessed July 2026.

¹⁶ CARB. Inhalable Particulate Matter and Health (PM2.5 and PM10). Available at: <https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health>. Accessed July 2026.

¹⁷ California Office of Environmental Health Hazard Assessment. Diesel Particulate Matter. Available at: <https://oehha.ca.gov/calenviroscreen/fact-sheet/diesel-particulate-matter>. Accessed July 2026.

¹⁸ CARB. Overview: Diesel Exhaust & Health. Available at: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>. Accessed July 2026.

¹⁹ South Coast AQMD. Multiple Air Toxics Exposure Study (MATES) 5. Available at: <http://www.aqmd.gov/docs/default-source/planning/mates-v/mates-v-final-report-9-24-21.pdf?sfvrsn=6>. Accessed July 2026.

engage in physical activity, which may improve physical health, reduce depression and anxiety, and improve cognitive function.²⁰ Green spaces can also shade buildings and sidewalks, thereby decreasing the use of air conditioning and promoting more active forms of transportation such as walking or biking and consequently reducing passenger vehicle use, thus indirectly reducing emissions.

Participant Requirements and Application Process

Participant Eligibility Criteria

Public and private entities²¹ including cities, counties, public agencies, non-profits, tribal governments, special districts, community organizations, small businesses, corporations, or individuals may apply for up to \$3 million in CAP Incentive funding to install green space or other active transportation infrastructure in the SLA community to increase tree canopy or improve recreational opportunities. Applicants and/or contractors must meet the following criteria to be eligible to apply:

- Have identified a project area located within a school attendance zone within the SLA Community boundary, consistent with the SLA CERP's Mobile Sources Objective B to reduce exposure at schools;
- Be the owner of, have the authority, or have received (or demonstrated the ability to receive) the necessary permissions and permits to install green space(s) at the identified project area(s) and can provide documentation, if requested; and
- Have prior experience installing green space projects and/or other related infrastructure projects, such as bike paths, walking paths, and sidewalks, and provide documentation (both photographic and otherwise).

Groups consisting of entities specializing in components of the project such as project management, site identification, tree selection, tree planting, construction and infrastructure development, outreach, and maintenance are encouraged to submit an application together. Such applications may improve the cost effectiveness and efficiency of project implementation which would maximize the number of green space projects and area of green space(s) installed. The maintenance requirements over the Project Life (described in Project Implementation and Project Life) extend beyond the liquidation deadline of these funds. Therefore, entities entrusted by the public (e.g., municipalities, public agencies) are encouraged to apply to help manage these funds and ensure the maintenance obligations are met. Otherwise, contractors may be required to agree to terms to maintain their green space project(s) over its Project Life.

Project Eligibility Criteria

Project applicants must meet the following criteria to be eligible to receive funding:

- Increasing:

²⁰ Centers for Disease Control and Prevention's Active People, Healthy Nation page. Available at:

<https://www.cdc.gov/physicalactivity/activepeoplehealthynation/everyone-can-be-involved/parks-recreation-and-green-spaces.html>. Accessed July 2026.

²¹ Private schools are not eligible for funding. No public money shall ever be appropriated for the support of any sectarian or denominational school, or any school not under the exclusive control of the officers of the public schools; nor shall any sectarian or denominational doctrine be taught, or instruction thereon be permitted, directly or indirectly, in any of the common schools of this State (California Constitution Article 9 § 8). Further, neither the Legislature, nor any county, city and county, township, school district, or other municipal corporation, shall ever make an appropriation, or pay from any public fund whatever, or grant anything to or in aid of any religious sect, church, creed, or sectarian purpose, or help to support or sustain any school, college, university, hospital, or other institution controlled by any religious creed, church, or sectarian denomination whatever; nor shall any grant or donation of personal property or real estate ever be made by the State, or any city, city and county, town, or other municipal corporation for any religious creed, church, or sectarian purpose whatever; provided, that nothing in this section shall prevent the Legislature granting aid pursuant to Section 3 of Article XVI (California Constitution Article 16 § 5).

- Tree canopy coverage by planting trees or other vegetation in new or existing publicly accessible recreational spaces such as parks or along bike paths, sidewalks, trails, etc.; and/or
- Recreational opportunities by installing new infrastructure such as bike paths, sidewalks, trails, as long as trees or other vegetation are planted alongside them; and/or
- Community access to green space by incorporating a portion of the project site, such as a designated plot or planting area, for use by community members to plant and maintain vegetation of their choosing;
- Planting only low-VOC, drought-tolerant, and non-poisonous trees (further described in Application Process and Scoring);²²
- Complying with the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and other federal, state, and local rules, regulations, and statutes, if applicable;
- Ensuring all property taxes of proposed site(s) are current at the time of application, if applicable;
- Adhering to the California Department of Forestry and Fire Protection (CAL FIRE) Urban and Community Forestry Grant Guidelines, Appendix F – CAL FIRE Standards and Specifications for Purchasing, Planting, and Maintaining Trees;²³
- Complying with California’s Plant Quarantine Manual²⁴ and other relevant federal, state, and local transport restrictions when obtaining plant species or material originating from outside of Los Angeles County;
- Complying with the most current versions of any applicable South Coast AQMD rules, including but not limited to, Rule 402 – Public Nuisance²⁵ and Rule 403 – Fugitive Dust;²⁶
- Adhering to the land use recommendations for s such as parks near sources of air pollution found in CARB’s Air Quality and Land Use Handbook: A Community Health Perspective;²⁷
- Performing maintenance, or establishing agreements with partnering entities to perform maintenance, of the green space project area(s) for the Project Life;
- Making the project site(s) available for inspection, if requested by South Coast AQMD and/or CARB, during the Project Life;
- Installing projects within the SLA Community Boundary;²⁸
- Providing photo documentation of Project Implementation once completed, and on an annual basis thereafter to demonstrate that project maintenance is occurring throughout the Project Life; and

²² Should a municipality have requirements that only specific tree species be planted, then applicants must comply with such rules which supersede the requirements detailed in this Plan.

²³ Appendix F, CAL FIRE Urban and Community Forestry Grant Guidelines. Available at: https://34c031f8-c9fd-4018-8c5a-4159cdf6b0d-cdn-endpoint.azureedge.net/-/media/calfire-website/what-we-do/grants/urban-and-community-forestry/grant-guidelines-archive/grant-guidelines-2024_ucf-ira.pdf?rev=daf2a3e0dc2b421d812ba8337d44c42e&hash=CB2B86A1B824D812D10FC8ED9C8E0E64#page=62. Accessed: July 2026.

²⁴ California Department of Food and Agriculture Plant Quarantine Manual. Available at: http://pi.cdfa.ca.gov/pqm/manual/htm/pqm_index.htm#exterior. Accessed: July 2026.

²⁵ South Coast AQMD, Rule 402 – Public Nuisance. Available at: <https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf?sfvrsn=4>. Accessed July 2026.

²⁶ South Coast AQMD, Rule 403 – Fugitive Dust. Available at: <https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf?sfvrsn=4>. Accessed July 2026.

²⁷ CARB. Air Quality and Land Use Handbook: A Community Health Perspective. Available at: <https://files.ceqanet.opr.ca.gov/221458-6/attachment/UNr-g159CW-r0G4DR8q6daNdAKT3RJTd8gGQCfz4wqFfl-eNdZNQEqjf8tfls1x6Gsae7YqpXwtFIZBdQ>. Accessed July 2026.

²⁸ SLA Community Boundary and Emissions Study Area. Available at: <https://scaqmd-online.maps.arcgis.com/apps/webappviewer/index.html?id=cd4c08533c7e41dfbb6d7ca874239c87>. Accessed July 2026.

- Not claiming emission reductions credits from the project during the entire contract period.²⁹

Project Implementation and Project Life

The contract period will be based on two phases: Project Implementation and Project Life.

- Project Implementation is the period between contract execution and South Coast AQMD receipt of photo documentation of completed grant-funded green space installation(s). Project Implementation must follow the schedule included in the executed contract.
- Project Life is five (5) years from the date of South Coast AQMD receipt of photo documentation of the completed green space project installation(s). The contractor is required to conduct regular maintenance of the grant-funded green space installation(s) throughout the Project Life. Contractor(s) must provide annual photo documentation of the maintained grant-funded green space installation(s). Applicants must notify South Coast AQMD of any change in ownership or control of the project site or awarded entity within 30 days, and must ensure that Project Life requirements, including maintenance, are transferred to and assumed by the new owner or controlling entity.

Application Process and Scoring

South Coast AQMD will release an RFP seeking applications from interested parties. The solicitation will include information on the funding amount for green space projects and instructions, including the deadline and requirements, to submit applications. If no applications are received during the RFP solicitation period, South Coast AQMD may pursue reissuance of the RFP and/or other mechanisms to fund green space projects, including, but not limited to, a request for quotes, program announcement, sole-source contract, or memorandum of understanding.³⁰

Outreach on the RFP will be conducted as described in the Mechanism for Informing the Community section. Once the RFP has been released and the solicitation period is open, South Coast AQMD will work with the SLA CSC to identify other potential outreach strategies. During the solicitation period, South Coast AQMD will be available to provide technical assistance and support, including calculating annual watering and other reporting requirements. South Coast AQMD will also provide general support to ensure application completeness. However, South Coast AQMD does not have expertise on the development and/or implementation of green space and related infrastructure (e.g., bike paths, sidewalks, etc.) installation activities and will not be able to provide such technical assistance. In addition to including supporting documentation demonstrating compliance with the items listed in Participant Eligibility Criteria and Project Eligibility Criteria, the application must include the following:

- Information on the proposed project site(s) including: a description of the location, current use, and existing conditions; pictures(s) in its current condition; documentation confirming the proposed project site is located within a school attendance zone within the SLA Community boundary; the approximate number and specific species of trees or other vegetation to be planted; description of existing or proposed infrastructure promoting more active forms of transportation such as bike or pedestrian paths, if applicable and the approximate total area (i.e., square footage) of the green space project(s);

²⁹ CARB. Community Air Protection Incentives 2025 Guidelines. Available at: https://ww2.arb.ca.gov/sites/default/files/2025-08/FINAL_DRAFT_CAP_Incentives_2024_Guidelines_revised_May_2025_ADA_TOC.pdf#page=138. Accessed July 2026.

³⁰ South Coast AQMD released a SELA Green Space Program RFP from February 2, 2024 through May 3, 2024, and received no applications. In the event that SLA Green Space Program RFP(s) do not receive applications, South Coast AQMD will consider other mechanisms to fund green space projects upon CARB's approval of this project plan modification.

- Estimates for annual water usage requirements for total proposed green space project area(s) as described below and per the guidance in Attachment A: Calculating Watering Requirements;
- Any qualitative benefits from the proposed green space project(s), such as those described in Additional Benefits;
- Detailed plans on outreach to the CSC via meetings, workshops, reports, and other avenues to solicit community feedback and provide green space project updates; and
- Other supporting documents, as needed.

Table A1 – List of Pre-Approved Tree Species for SLA Green Space Project in Attachment A provides a tree list which includes trees identified in TreePeople’s City of Los Angeles Approved Street Tree List for having low emissions of VOCs and low or very low watering requirements. Trees with low VOC emissions were chosen to lessen the potential for the formation of ground-level ozone. Applicants may plant tree species not listed in Table A1 – List of Pre-Approved Tree Species for SLA Green Space Project, but must provide evidence deemed acceptable by South Coast AQMD that those trees have low potential for VOC emissions and are drought tolerant. Applicants may use the article referenced in Attachment A which lists tree species with low potential for VOC emissions, but they must identify which of those species are drought-tolerant. Acceptable evidence demonstrating a tree species’ drought-tolerance or low potential for VOC emissions can include scientific journal articles; published reports or documents by public agencies; or other documents published by other entities which have been vetted or approved by a public agency or scientific body. However, if the proposed green space installation is within the jurisdiction of a municipality that has its own requirements about eligible tree species, those requirements supersede those of this Plan. It is the responsibility of the applicant to ensure all municipal requirements are met. Acceptable documentation of such requirements can include published reports or documents by a given municipality and/or copies of correspondence with municipal staff, including their contact information. Applicants will be required to provide an estimate of the annual watering requirements for their proposed green space project(s). Should an applicant propose to plant tree species mentioned in Table A1 – List of Pre-Approved Tree Species for SLA Green Space Project in Attachment A, Table A2 – Annual Watering Requirements for Pre-Approved Tree in Attachment A provides the annual watering requirements for those species. Attachment A provides calculations and examples for calculating the watering requirements for those species. Additionally, Attachment A provides calculations and examples on how to calculate annual watering requirements for trees not included in Table A1 – List of Pre Approved Tree Species for SLA Green Space Project.

As mentioned in Project Implementation and Project Life, contractor(s) will be required to maintain their green space project installations(s) for the duration of the Project Life. Grant funding can be used for maintenance. However, preference will be given to applicants who are able to maintain the project area(s) using separate funds. An example includes establishing maintenance agreements with collaborators (e.g., municipalities) who share a mutual interest in the success of the green space project(s) and are able to maintain them for their Project Life using separate financial resources. Other examples include leveraging CAP Incentive funds towards projects with an air quality benefit, such as granting access to electrical infrastructure to utilities or other companies to install vehicle charging stations or solar panels in the project area (or elsewhere in the SLA community) in exchange for funding the maintenance for green space installations. Another such example includes committing to the use of zero-emission lawn and garden equipment³¹ to maintain the installed green space(s) throughout the duration of the Project Life.

Additionally, preference will be given to applicants that leverage other applicant-identified sources of funding with the green space project area(s), and include an air quality benefit in addition to the green space(s) installation. Examples include applicants using other sources of funding to: install electric vehicle

³¹ South Coast AQMD. Electric Lawn and Garden Program. Available at:

<https://www.aqmd.gov/home/programs/community/electric-lawn-and-garden-programs>. Accessed July 2026.

charging stations or solar panels; add bike or pedestrian paths, or include a strategy to reduce vehicle miles traveled in the SLA community. Preference will also be given for submissions which incorporate feedback received by the CSC on their preferred types and locations of green space projects as listed in Attachment B: Summary of CSC Feedback.

Scoring preference will also extend to applications that incorporate a community garden component within the green space project area, in which a designated plot or planting area is set aside for use by community members to grow plants of their choosing. As noted above, this component is not a separate project type or eligible activity and is a design element that may be incorporated within an eligible green space project. Its inclusion will be considered favorably during scoring given the SLA CSC's expressed interest in this feature.

It is the policy of South Coast AQMD to ensure that all businesses including minority business enterprises, women business enterprises, disabled veteran business enterprises and small businesses have a fair and equitable opportunity to compete for and participate in South Coast AQMD contracts. The RFP will be advertised in newspapers and other platforms to leverage the most cost-effective method of outreach to the SLA Community. South Coast AQMD will work with the CSC to identify the most effective approach to conduct outreach and distribute the RFP throughout the SLA community. Additionally, potential applicants may be notified utilizing South Coast AQMD's own electronic listing of certified minority vendors. Notice of the RFP will be emailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations and placed on South Coast AQMD's website. Additionally, to provide equitable access as part of the RFP process, South Coast AQMD will hold a bidder's conference.

For any RFP or other public solicitation in which South Coast AQMD receives two or more applications, applications will be scored using the criteria shown in Table 1 – Green Spaces Application Scoring Criteria. For all criteria except for CSC review and support, points will be scored on a relative basis. For example, for the criteria of Projected area of increased green space, the application that proposes the largest increase of green space area will receive the highest points available (i.e., 10 points) and all other bids will receive a point value to scale (i.e., less than 10 points). The score for CSC review and support will be determined by averaging the points received from CSC members. If only one application is received for any public solicitation, South Coast AQMD will evaluate the application's eligibility based on criteria listed in the Participant Requirements and Application Process section and execute a contract if deemed appropriate.

Table 1-Green Spaces Application Scoring Criteria

Scoring Criteria	Points Available
Plan Comprehensiveness (0 – 50 points)	
• <i>Thoroughness of plans for:</i> ○ <i>outreach</i> ○ <i>site identification</i> ○ <i>tree planting and/or active transportation infrastructure</i> ○ <i>acquisition of permits and/or other necessary permissions</i> ○ <i>incorporating CSC feedback</i> • <i>Applicant's experience completing green space projects</i> • <i>Potential for increased or improved recreational opportunities (e.g., planting trees along existing sidewalks or bike paths, installing new bike paths with trees planted alongside, incorporating community garden plots, etc.)</i> • <i>Projected area (i.e., square footage) of increased green space</i> • <i>Maintenance Plan outline</i>	3 3 3 3 3 10 10 10 5
Environmental and Other Benefits (0 – 10 points)	
• <i>Detailing of additional benefits from green space project(s) (e.g., proximity to sensitive receptors, shade provided to nearby buildings, etc.)</i> • <i>Funding leveraged to include an air quality benefit with green space installation</i>	5 5
Cost and Resource Effectiveness (0 – 20 points)	
• <i>Project cost per area (i.e., dollars per square foot of total green space area)</i> • <i>Efficient use of water for annual watering requirements for green space projects</i> • <i>Cost-sharing and/or leveraging CAP Incentive funds to support maintenance activities</i>	10 5 5
Project Readiness (0 – 10 points)	
• <i>Readiness³² of project implementation</i> • <i>Timeliness³³ of project implementation</i>	5 5
CSC Support (0 – 10 points)	
• <i>CSC review and support*</i>	10
Total Points Available: 100	

* All criteria will be scored on a relative basis except for *CSC review and support*. The score for *CSC review and support* will be determined by averaging the points received from CSC members.

³² Readiness of the proposal refers to the extent to which the plan is developed and ready for implementation. Applications that are complete and include all necessary permissions, documentation (e.g. permits), details of tree planting activities (e.g., costs, timelines, contracting entity), and gardening equipment and materials (e.g., shovels, trees, tree seedlings, fertilizer), will likely receive full points.

³³ Timeliness of the proposal refers to the duration of time in which project implementation will be completed.

Once the solicitation period has ended, green space applications will be reviewed by South Coast AQMD. Applications will be assessed for their completeness and the extent to which they fulfill the guidelines detailed in Participant Eligibility and Project Eligibility Criteria. The scoring criteria outlined in Table 1 – Green Spaces Application Scoring Criteria will guide the decision-making process for those applications deemed complete. When the application review process is complete, South Coast AQMD will provide the information to the SLA CSC. South Coast AQMD will respond to applicants as soon as feasible considering the number of applications received, not to exceed 90 days of the application deadline. Based upon this initial evaluation, possible next steps include:

- A request for more detailed information which would be used to further evaluate the application;
- An offer from South Coast AQMD to enter into contract development based on information submitted; or
- Notification that the application has been declined from further consideration.

Funding

Maximum Funding Amount per Project

A single application will be eligible for the full funding amount of \$3 million identified in the RFP depending on the scope and comprehensiveness of the application. Such decisions will be determined by plans for outreach, permit acquisition, planting of green spaces that increase or improve recreational opportunities or encourage active forms of transportation, incorporation of project components with an air quality benefit, and maintenance outlined in each application along with the process by which sites were identified. The selected contractor(s) will be reimbursed in accordance with the payment terms outlined in the contractor's payment schedule, which will be based on the scheduled deliverables in the RFP.

The maximum funding percentage provided for the following costs will be 100%:

- Gardening equipment and materials (including water for maintenance);
- Software applications (e.g., Geographic Information System (GIS) software);
- Outreach and outreach materials; and
- Labor and construction (e.g., planting and maintenance, equipment and material mobilization, construction management including oversight and consultation).

Applicants already in possession of necessary equipment and materials such as software and gardening equipment are encouraged to apply. Project readiness will be considered during the application review process and applicants already in possession of necessary equipment and materials will be given preference.

Eligible and Ineligible Costs

The following costs are eligible for funding under this Plan throughout the Project Implementation and Project Life phases of a given project:

- Equipment and materials (e.g., shovels, trees, tree seedlings, fertilizer, construction materials for bike, pedestrian pathways, etc.)

- Labor and construction (including contracted services)
- Outreach and outreach materials
- Fees for obtaining necessary permits and/or permissions solely related to installation of green spaces (although preference will be given to applicants with existing permits or the ability to obtain permits at applicant's own expense)
- Maintenance for green space projects including watering (although preference will be given to applicants who are able to use other funding sources as indicated in Table 1)
- Signs and interpretive aids communicating information about the project
- Up to 25% of the grant request may be budgeted for non-construction costs, including, but not limited to, design and project administration and management
- Up to 10% of the grant request may be budgeted for contingency costs (i.e., unforeseen costs)

The following costs are ineligible for funding under this Plan:

- Overhead (e.g., office rent, utilities, office equipment and supplies, etc.)

Project Selection

Applications will be reviewed for their completeness and the extent to which they meet the criteria detailed in Participant Eligibility and Project Eligibility Criteria, and scored based on the scoring criteria provided in the Application Process and Scoring section. Once applications have been reviewed and scored, eligible projects will be ranked and presented to the SLA CSC for additional feedback before finalizing applicant(s) selection. Eligible entities are encouraged to apply in partnership with other interested parties, as one application may be eligible for the full funding amount, depending on the scope and comprehensiveness of the green space project.

Reporting Requirements

All projects that receive funding under this program must comply with the reporting requirements described in the Reporting section of Chapter 3 in the 2025 CAP Incentives Guidelines.⁷ Participants must ensure that project-related information is complete, correct, and supported by documentation and provided to South Coast AQMD upon request. South Coast AQMD will compile this information and prepare mid-cycle and annual reports for CARB.

At the conclusion of the project, South Coast AQMD will utilize project information to report the benefits which came from this program. Information such as projects selected, dollars spent, and associated community benefits will be compiled and provided during CSC meeting updates and included in South Coast AQMD's AB 617 Annual Progress Reports.

Attachment A: Calculating Watering Requirements

Applicants are encouraged to propose tree species included in Table A1 to plant as part of their green space project(s).²⁰ All trees on the list have a low or very low potential for VOC emissions per TreePeople's City of Los Angeles Approved Street Tree List and have low watering requirements based on the Water Use Classification of Landscape Species (WUCOLS IV) Water Rating (described further below). Also, the table notes whether a tree species is native to California and a tree's allergy potential for informational purposes; however, applications will not be scored on either criteria.

Table A1 – List of Pre-Approved Tree Species for SLA Green Space Project

Common Name	Scientific Name	CA Native?	Allergy Potential*
Marina strawberry tree	<i>Arbutus 'Marina'</i>	No	3
Western redbud	<i>Cercis occidentalis</i>	No	5
Sweet bay	<i>Laurus nobilis</i>	No	Females – 2 Males – 9
Santa Cruz island ironwood	<i>Lyonothamnus floribundus</i> <i>ssp. Asplenifolius</i>	Yes	4
Lemon bottle brush	<i>Melaleuca citrina</i>	No	9
Olive tree (fruitless)	<i>Olea europaea</i>	No	10
Aleppo pine	<i>Pinus halepensis</i>	No	4
Catalina cherry	<i>Prunus ilicifolia ssp. Lyonii</i>	Yes	6
African sumac	<i>Searsia (Rhus) lancea</i>	No	Females – 7 Males – 10

* Rating scale from Thomas Ogren's Ogrens Plant Allergy Scale System in *Allergy Free Gardening*. 1 indicates trees with the least allergenic potential, while 10 indicates trees with the highest. While many tree species have both male and female flowers, some only grow flowers of either sex hence the listing of both female and male allergenic potential for those species (such as sweet bay).

It is recommended applicants review Michael T. Benjamin and Arthur M. Winer's publication, "Estimating the Ozone-Forming Potential of Urban Trees and Shrubs," which assesses the ozone forming potential of biogenic hydrocarbon emissions from tree and shrub species in the South Coast Air Basin.³⁴ Applicants may include the tree species listed in Table 3 of the publication with zero daily ozone-forming potential in their proposed green space projects, but for those species which do not overlap with those listed in Table A1, applicants must provide evidence that they are drought-tolerant and nonpoisonous. Acceptable evidence demonstrating a tree species' drought-tolerance or low potential for VOC emissions can include scientific journal articles; published reports or documents by public agencies; or other documents published by other entities which have been vetted or approved by a public agency or scientific body.

Table A2 below lists the annual watering requirements for the tree species listed in Table A1. It should be noted that while the Plan otherwise requires the planting of low-VOC, drought tolerant, and nonpoisonous trees, if a municipality has requirements that require specific tree species be planted, the

³⁴ Michael T. Benjamin and Arthur M. Winer. Estimating the Ozone-Forming Potential of Urban Trees and Shrubs. Available at: [https://doi.org/10.1016/S1352-2310\(97\)00176-3](https://doi.org/10.1016/S1352-2310(97)00176-3). Accessed July 2026.

municipality's requirements supersede the requirements detailed in this Plan and applicants must comply with those requirements.

Table A2 – Annual Watering Requirements for Pre-Approved Tree Species

Common Name	Scientific Name	Annual Watering Requirement (gallons)
Marina strawberry tree	<i>Arbutus 'Marina'</i>	3263.2
Western redbud	<i>Cercis occidentalis</i>	522.1
Sweet bay	<i>Laurus nobilis</i>	1174.8
Santa Cruz island ironwood	<i>Lyonothamnus floribundus</i> <i>ssp. Asplenifolius</i>	3263.2
Lemon bottle brush	<i>Melaleuca citrina</i>	1174.8
Olive tree (fruitless)	<i>Olea europaea</i>	2088.5
Aleppo pine	<i>Pinus halepensis</i>	3263.2
Catalina cherry	<i>Prunus ilicifolia ssp. Lyonii</i>	2088.5
African sumac	<i>Searsia (Rhus) lancea</i>	4699.0

To estimate water use requirements for a green space project involving the above tree species, applicants should use the watering requirement factors above multiplied by the number of trees for each species proposed to be planted using the following equation:

$$\text{Gallons Used Annually (per project)} = \text{Number of Trees} \times \text{Annual Watering Requirement per Tree}$$

An example is provided below on how to calculate the annual watering requirements for a green space project consisting of trees listed in Table A2:

Example: Calculating the total annual watering requirements for a green space project consisting of 350 Aleppo pine trees and 150 olive trees (fruitless)

Annual watering requirements for 350 Aleppo pine trees

Annual watering requirement = 350 trees × 3,263.2 gallons per tree annually = 1,142,120 gallons

Annual watering requirements for 150 olive trees (fruitless)

Annual watering requirement = 150 trees × 2,088.5 gallons per tree annually = 313,275 gallons

Summary of results

Tree Species	Annual Watering Requirement (gallons)
Aleppo pine trees	1,142,120
Olive trees	313,275
Project Total:	1,455,395

Community Gardens

Community gardens are eligible as a component of green space projects under this Plan and must meet the applicable Project Eligibility Criteria, including requirements for providing air quality benefits. Within the community garden plot area itself, the pre-approved tree species and associated annual watering requirements in Table A2 do not apply and may use plant species appropriate for food production. This exception is limited to the community garden plot area, with all other portions of the project continuing to meet Table A2 requirements and be designed and maintained to provide air quality benefits.

DRAFT

Calculating Evapotranspiration Using WUCOLS IV Tool User Guide

For trees that are not listed in Table A1 – List of Pre-Approved Tree Species for SLA Green Space Project, applicants are encouraged to use the instructions for the Water Use Classification of Landscape Species (WUCOLS IV) tool and the annual watering requirement equations below. The WUCOLS IV Tool is used to estimate tree-specific evapotranspiration (ET_o) that will be used for the annual watering requirements equations. This tool is available here and is operational as of July 2026: <https://ccuh.ucdavis.edu/wucols>. Applicants may also estimate watering requirements using other methods, provided they disclose their methodology which is to be approved by South Coast AQMD.

Step 1. Open Tool

- a. From the tool home page, click "*Plant Search Database*" to enter the tool .



The screenshot shows the homepage of the California Center for Urban Horticulture (CCUH) Water Use Classification of Landscape Species (WUCOLS) tool. The header includes the UC Davis logo and navigation links: Home, About Us, Events, Resources, Partnerships, Ways to Give, and Students. A search bar and 'Quick Links' are also present. The main heading is 'Water Use Classification of Landscape Species (WUCOLS)'. Below this, a breadcrumb trail reads: California Center for Urban Horticulture > Resources > Projects > Water Use Classification of Landscape Species (WUCOLS). The main content area features a 'WUCOLS Update: August 2022' section with a list of updates, including a new search page design, improved search process, interactive Google map, and a new 'Plant Search Database' link highlighted with a red arrow. A sidebar on the right contains links to Acknowledgements, Download WUCOLS IV Plant List, Download WUCOLS IV User Manual, Partners, Plant Factors For Turfgrasses, Plant Search Database (highlighted with a red arrow), Plant Search Instructions, Project Background, and WUCOLS IV FAQ's.

Step 2. Specify Project Location

- a. Choose either "Region 3: South Gate" or "Region 3: Huntington Park" from the "City/Region" drop-down menu. In the example below, the user selected "Region 3: South Gate".

UC DAVIS
California Center for Urban Horticulture

Home About Us > Events Resources > Partnerships Ways to Give Students > Quick Links <

Wucols DB

Home > Wucols DB

Search Favorites (0) Clear Search Form (Start over)

City/Region
Start typing to search

Region 3: South Gate

Region 3: Santa Maria
Region 3: Santa Monica
Region 3: Santa Paula
Region 3: Simi Valley
Region 3: Solvang
Region 3: Somis
Region 3: South Gate

High

Welcome to WUCOLS

WUCOLS *Water Use Classification of Landscape Species*

Welcome to the “enhanced” WUCOLS Plant Searchable Database. For an overview of the “new enhancements”, please click on: [WUCOLS](#) or visit the California Center for Urban Horticulture’s website

WUCOLS Water Use Classification of Landscape Species helps you create a landscape plan based on plant water use within your city/region.

[Instructions \(for step-by-step instructions, please click on: Step by Step\):](#)

1. Select a City/Region

Step 3. Specify Plant Type and Water Use Requirements

- There are two options for specifying the tree type. If the tree type for the project has already been determined, enter its name in the “*Plant Name*” search box.
- Otherwise, the water usage and plant type can be chosen from the lists on the left. In the example below, the user selected “Very Low” or “Low” watering requirements in the “*Water Use*” category and “Trees” for the “*Plant Types*” category. As you check the desired options in the “*Water Use*” and “*Plant Types*” sections, the results, “*Matching Plants*” will automatically update on the right and will appear alphabetically.

Step 4. Select Plant(s) and Obtain Evapotranspiration Rate (ET_o)

- For each tree that will be proposed for the project, click the tree under the “Name” column.
- On the resulting page, the region for which “City/Region” was input in **Step 2** will be highlighted with the evapotranspiration rate in percentage, as shown in the example below.



Searsia lancea (*Rhus lancea*)

★

Botanical Name	Searsia lancea (<i>Rhus lancea</i>)
Common Name	African sumac
Plant Type(s)	Tree

Water Usage by Region

Region 1: North-Central Coastal		Low	10-30% ET ₀
Region 2: Central Valley		Low	10-30% ET ₀
Region 3: South Coastal		Low	10-30% ET ₀
Region 4: South Inland		Low	10-30% ET ₀
Region 5: High and Intermediate Desert		Moderate	40-60% ET ₀
Region 6: Low Desert		Moderate	40-60% ET ₀

Step 5. Calculate Average Evapotranspiration Rate (ET₀)

- a. The Evapotranspiration Rate, ET₀, is shown as a range of percentages depending on the region. Take note of the average value of the percentage range. In the example above, the average would be 20%.

Equations for Calculating Tree Watering Requirements

The University of California Division of Agriculture and Natural Resources provides a methodology to estimate tree watering requirements.³⁵ Additional information is provided in *Making Sense of ET Adjustment Factors for Budgeting and Managing Landscape Irrigation*.³⁶

The calculations for tree watering requirements provide an estimate for a green space project's annual watering requirements for which there are two equations: 1) for the total land area of a green space project and 2) for those involving individual trees. Applicants are to use the equation for watering requirements for total land area if the tree canopy and that of mixed planting cover at least 80% of the project area's surface. Otherwise, applicants are to calculate watering requirements using the equation for individual trees.

³⁵ University of California, Division of Agriculture and Natural Resources, Center for Landscape and Urban Horticulture.

Available at:

https://ucanr.edu/sites/UrbanHort/Water_Use_of_Turfgrass_and_Landscape_Plant_Materials/Estimating_Water_Requirements_of_Landscape_Trees/. Accessed July 2026.

³⁶ University of California, Division of Agriculture and Natural Resources Cooperative Extension, Making Sense of ET Adjustment Factors for Budgeting and Managing Landscape Irrigation. Available at: <https://ucanr.edu/sites/UrbanHort/files/217692.pdf>. Accessed July 2026.

In both equations, the reference evapotranspiration (ET₀) is the annual average evapotranspiration rate in inches for a given time period and location. The annual average ET₀ is calculated using data collected from the California Department of Water Resources' (CDWR) California Irrigation Management Information System (CIMIS)³⁷ Station #223 in North Hollywood, which is the closest site to the SELA community. The average annual ET₀ is 53.38 inches, which is the value reported by CIMIS for the North Hollywood Station on April 21, 2023, and should be used for both equations. The plant factor (PF) is the tree-specific average ET₀ obtained from the WUCOLS tool above. Both equations along with descriptions of each variable are shown below.

Annual Watering Requirements by Total Land Area

Equation 1 is intended to be used for a land area with closely spaced trees or mixed vegetation, in which tree canopies or mixed planting covers at least 80% of the landscape area.

Equation 1 (Watering Requirements by Total Land Area): Gallons = ET₀ × PF × LA × 0.623

where:

- ❑ **ET₀** (inches per year) is the evapotranspiration in inches of the average annual evapotranspiration for a given period and location. The ET₀ to be used for SELA green space projects is 53.38 inches, which is the value reported by CIMIS for the North Hollywood Station on April 21, 2023.
- ❑ **PF** is the Plant Factor for the tree-specific average ET₀ obtained from the WUCOLS tool above. Thus, if the ET₀ range for a given tree was listed as between 10% - 30%, then its average value is 20% and a PF of 0.2 should be used.
- ❑ **LA** (square feet) is the land area covered by the green space project area (the equation assumes plant canopy covers at least 80% of the landscape area).
- ❑ **0.623** (gallons/inch-square foot) is the factor to convert inches of water per square foot to gallons.

Example: Calculating the annual watering requirements for a 10,000 square foot green space project planting searsia lancea (rhus lancea) trees

$$\text{Gallons} = \text{ET}_0 \times \text{PF} \times \text{LA} \times 0.623$$

$$\text{ET}_0 = 53.38 \text{ inches per year}$$

$$\text{PF} = 0.2$$

$$\text{LA} = 10,000 \text{ square feet}$$

$$\begin{aligned} \text{Gallons} &= 53.38 \text{ inches} \times 0.2 \times 10,000 \text{ square feet} \times 0.623 \text{ gallons/inch-square foot} \\ &= \mathbf{66,511 \text{ gallons per year}} \end{aligned}$$

³⁷ CDWR CIMIS available at: <https://cimis.water.ca.gov/>. Accessed July 2026.

Annual Water Requirements by Individual Tree

Equation 2 is intended to be used to estimate annual watering requirements for individual trees, or for those green space projects in which the tree canopy covers less than 80% of the project's surface area. This equation produces a factor to be multiplied by the number of trees in the green space project.

Equation 2: **Gallons = $ET0 \times PF \times (R \times R \times 3.14) \times 0.623$**

- ❓ **ET0** (inches per year) is the evapotranspiration in inches of the average annual evapotranspiration for a given period of interest and location. The ET0 to be used for SELA green space projects is 53.38 inches, which is the value reported by CIMIS for the North Hollywood Station on April 21, 2023.
- ❓ **PF** is the Plant Factor for the tree-specific average ETo obtained from the WUCOLS tool above. Thus, if the ETo range for a given tree was listed as between 10% - 30%, then its average value is 20% and a PF of 0.2 should be used.
- **R** (feet) is the radius of the tree canopy, which is the widest canopy diameter in feet divided by 2. $R \times R \times 3.14$ will produce the area of the circle created by the tree's canopy projection over the soil.
- ❓ **0.623** (gallons/inch-square foot) is the factor to convert an inch of water per square foot to gallons.

Example: Calculating the annual watering requirements for a green space project planting 10 *searsia lancea* (*rhus lancea*) trees with a PF of 0.2, a tree canopy diameter of 30 feet, and whose tree canopy covers less than 80% of the project's surface area

Gallons = $ET0 \times PF \times (R \times R \times 3.14) \times 0.623$

ET0 = 53.38 inches per year

PF = 0.2

R = 30 feet/2 = 15 feet

Gallons = $53.38 \text{ inches} \times 0.2 \times (15 \text{ feet} \times 15 \text{ feet} \times 3.14) \times 0.623 \text{ gallons/inch-square foot}$

= $53.38 \text{ inches} \times 0.2 \times 706.5 \text{ square feet} \times 0.623 \text{ gallons/inch-square foot}$

= 4,699 gallons per year per tree

= 4,699 gallons per year per tree $\times$ 10 trees

= 46,990 gallons per year