



# DISTRICTWIDE PLAN FOR SUSTAINABILITY

---

*SANTA MONICA – MALIBU UNIFIED SCHOOL DISTRICT | FEBRUARY 2019*

# TABLE OF CONTENTS

---

<b>EXECUTIVE SUMMARY .....</b>	<b>4</b>
<b>INTRODUCTION .....</b>	<b>5</b>
Vision .....	6
Sustainability Plan Framework .....	6
Plan Development Process .....	8
<b>BASELINE AND PERFORMANCE INDICATORS .....</b>	<b>9</b>
<b>SUSTAINABILITY PLAN .....</b>	<b>10</b>
Climate .....	10
Education + Engagement .....	12
Energy Efficiency + Renewables.....	22
Water .....	33
Solid Waste.....	44
Transportation .....	54
Food, Nutrition + Wellness .....	63
Green Building + Operations .....	73
<b>IMPLEMENTATION .....</b>	<b>83</b>
Leadership.....	84
Program Management.....	85
Monitoring + Reporting.....	87
Communications .....	87
Future Updates .....	88
<b>APPENDIX .....</b>	<b>89</b>
Key Performance Indicators .....	90
2017-18 Baseline Inventory .....	91
Sample Job Descriptions - Proposed Sustainability Staff Positions .....	98

# LIST OF ACRONYMS + ABBREVIATIONS

---

<b>AVR</b> – Average Vehicle Ridership	<b>IPM</b> – Integrated Pest Management
<b>BMP</b> – Best Management Practice	<b>kBTUs</b> – Kilo British Thermal Unit
<b>BP</b> – Board Policy	<b>kWh</b> – Kilowatt Hour
<b>C+D</b> – Construction + Demolition	<b>LAUSD</b> – Los Angeles Unified School District
<b>CALGreen</b> – California Green Building Standards Code	<b>LCAP</b> – Local Control Accountability Plan
<b>CARB</b> – California Air Resources Board	<b>LED</b> – Light-Emitting Diode
<b>CDE</b> – California Department of Education	<b>LEED</b> – Leadership in Energy and Environmental Design
<b>CEI</b> – Continuous Energy Improvement Program	<b>LID</b> – Low Impact Development
<b>CHPS</b> – Collaborative for High Performance Schools	<b>M+O</b> – Maintenance + Operations
<b>CNG</b> – Compressed Natural Gas	<b>MOU</b> – Memorandum of Understanding
<b>CO<sub>2</sub></b> – Carbon Dioxide	<b>MSW</b> – Municipal Solid Waste
<b>CO<sub>2e</sub></b> – Carbon Dioxide Equivalent	<b>NGSS</b> – California Next Generation Science Standards
<b>EMS</b> – Energy Management System	<b>PV</b> – Photovoltaic
<b>EPA</b> – Environmental Protection Agency	<b>RFP</b> – Request for Proposal
<b>EPEAT</b> – Electronic Product Environmental Assessment Tool	<b>SAMOHI</b> – Santa Monica High School
<b>EPP</b> – Environmentally Preferable Purchasing	<b>SCE</b> – Southern California Edison
<b>EV</b> – Electric Vehicle	<b>SEMP</b> – Strategic Energy Management Plan
<b>FY</b> – Fiscal Year	<b>SMMUSD</b> – Santa Monica-Malibu Unified School District
<b>GHG</b> – Greenhouse Gas	<b>SOP</b> – Standard Operating Procedure
<b>GSA</b> – General Services Administration	<b>USDA</b> – United States Department of Agriculture
<b>HVAC</b> – Heating, Ventilation, + Air Conditioning	<b>USGBC</b> – United States Green Building Council
<b>IEQ</b> – Indoor Environmental Quality	<b>ZNE</b> – Zero Net Energy

# EXECUTIVE SUMMARY

---

The Santa-Monica Malibu Unified School District has a long-standing tradition of demonstrating leadership in tackling complex challenges head on. Global climate change is one of the most urgent issues of our time and the decisions that the District makes today regarding its contributions to climate change will have a direct impact on the security of tomorrow. Acknowledging this reality, the District believes it has a responsibility to take immediate action and lead by example to promote environmental stewardship and climate protection in an effective and measurable way.

The District is proud to present the first Districtwide Plan for Sustainability, which provides a strategic roadmap for formalizing and uniting the District's many existing sustainability initiatives; incorporating sustainability into Education Services and all aspects of student learning; and integrating climate protection, resource efficiency, waste management, and other sustainability practices into District operations.

The Sustainability Plan is organized into eight sustainability focus areas:

- **Climate**
- **Education + Engagement**
- **Energy Efficiency + Renewables**
- **Water**
- **Solid Waste**
- **Transportation**
- **Food, Nutrition + Wellness**
- **Green Building + Operations**

The plan establishes a framework for assessment and progress on each focus area by documenting baseline conditions, establishing key goals and performance indicators, highlighting current initiatives and best practices, recommending improvement strategies, and

anticipating project costs and funding mechanisms. The Sustainability Plan concludes with recommendations for the resources, monitoring and reporting strategies, and public communication considerations needed to successfully implement a plan of this magnitude. The implementation of this plan will enhance the District's resilience in the face of climate change and create a culture of environmental consciousness throughout the District.

The decision to integrate sustainability into the District's organizational culture and curriculum will not only reduce the District's environmental footprint but it will also generate cost savings, support student achievement, and develop the next generation of environmental stewards. There is tremendous opportunity for the District to adapt curriculum offerings to prepare students for the challenges of the 21st century and to promote innovative career pathways that meet the demands of a green economy. The District is committed to fostering extraordinary achievement for all, which requires creative action to address critical environmental concerns.

The District's decision to do their part to protect the future of the environment and educate the next generation's leaders is necessary, noble, and challenging. However, the Sustainability Plan ensures that the road ahead is marked with strategic direction and clear objectives. The Districtwide Plan for Sustainability affords the Santa Monica-Malibu Unified School District the opportunity to equip students and staff with the knowledge, skills, and support needed to transform the District into a model for sustainability in action. The Sustainability Plan is the product of collaborative efforts between the District's Board of Education, staff, educators, students, parents, and community members.





# INTRODUCTION

The Santa Monica-Malibu Unified School District (the District) serves approximately 11,000 Preschool – 12th grade students and operates sixteen school sites throughout the Santa Monica and Malibu communities. Recognizing the immediate threat posed by climate change and the urgent nature of action, the District seeks to demonstrate leadership on climate change and further embed sustainability values and practices into the District’s operations, facilities, and educational programs. In support of this commitment, the District is proud to present the first Districtwide Plan for Sustainability (the plan), which provides a strategic roadmap for formalizing and uniting the District’s many existing sustainability initiatives; incorporating sustainability into Education Services and all aspects of student learning; and integrating climate protection, resource efficiency, waste management, and other sustainability practices into District operations. The Sustainability Plan will provide the foundation for catalyzing action and measurable change throughout the District to mitigate the most pressing environmental issues facing the District community now and in the future.

The Sustainability Plan builds on and advances the District’s existing sustainability commitments and initiatives in order to create a unifying framework and road map for the District to build a healthier, more sustainable campus community. It also formally aligns the District with both local City and community sustainability goals. While the development of a Districtwide Sustainability Plan offers an opportunity to reduce energy consumption, environmental impact, and operating costs, the District also recognizes that strategic planning for sustainability

offers many benefits to its students, teachers, staff, and surrounding community in the form of curriculum enrichment, enhanced student performance, resilience in the face of a changing climate, and engagement and leadership opportunities. The scope of the plan directly supports the integration of sustainability into the District’s operations and education programs, but it will also be used to inform community partnerships and identify collaborations that can support the District’s strategic vision for sustainability.

The District’s Board of Education spearheaded action on sustainability in 2010 when they adopted the Green School Operations Policy (BP 3510(a)), formalizing the commitment to integrating environmental accountability into District operations. The subsequent adoption of Board Policies addressing green building, sustainable operations, environmental education, and student health and wellness highlight not only a desire for, but the critical need for centralized coordination and the strategic integration of sustainability into all aspects of the School District. The District’s commitment to sustainability was further re-enforced by the adoption of the 2016-2019 Local Control Accountability Plan (LCAP), which commits the District to ensuring facilities are safe, sustainable, and well maintained as part of its commitment to excellence and equity.

The Sustainability Plan is the product of collaborative efforts between the District’s Board of Education, staff, educators, students, parents, and community members.

## VISION

The vision for the Sustainability Plan is to transform the District into a model of sustainability in action and to educate the next generation of environmental stewards by uniting the District's many existing sustainability initiatives, establishing resources and support for sustainability that ensure equity Districtwide, incorporating sustainability principles into all aspects of student learning, and adopting best practices for environmental stewardship and climate protection.

This vision will support the District's core mission of "extraordinary achievement for all while simultaneously closing the achievement gap" by promoting conditions that foster student health and academic success. The Sustainability Plan provides a roadmap for achieving this vision by establishing a framework for action, assessment, and accountability for sustainability throughout the District. Through the implementation of this plan, the District strives to mitigate its climate impacts, drive continual improvement across a range of performance indicators, and to achieve recognition for these efforts by receiving a Green Ribbon Schools – District Sustainability Award.



## SUSTAINABILITY PLAN FRAMEWORK

Sustainability requires system-wide change, recognizing that all systems are interconnected and interdependent. While the framework for the Sustainability Plan divides the District's approach to sustainability into eight sustainability focus areas, the District recognizes that these topics are connected and work across focus areas will be necessary to achieve the sustainability program goals. For the purposes of organizing this plan, the following eight sustainability focus areas were identified:



### CLIMATE



### EDUCATION + ENGAGEMENT



### ENERGY EFFICIENCY + RENEWABLES



### WATER



### SOLID WASTE



### TRANSPORTATION



### FOOD, NUTRITION + WELLNESS



### GREEN BUILDING + OPERATIONS

Through the plan development process, the District:

- Documented baseline conditions
- Established goals and performance indicators
- Highlighted current initiatives and best practices
- Identified improvement strategies
- Evaluated project costs and funding mechanisms for each of these focus areas

The Sustainability Plan framework brings together these various components into one cohesive plan for Districtwide sustainability.

The following section provides a description of each of the framework components.

## PERFORMANCE INDICATORS

The performance indicators are the metrics by which the District will measure progress towards the achievement of its sustainability goals. Additional detail on the performance indicators selected for each focus area can be found in the Key Performance Indicators section of this plan.

**GOALS:** The Sustainability Plan goals are designed to be specific, measurable, and time-bound, and provide benchmarks to help the District achieve its sustainability vision. The goals are phased with target achievement dates of Ongoing, 2020, 2025, and 2030, which will support the District with driving continual improvement over time. The Ongoing goals represent pre-existing achievements or conditions that the District is dedicated to maintaining over time. It is recommended that the District review and revise its goals a minimum of every five years to ensure that they continue to align with program direction and drive innovation.

## CURRENT INITIATIVES

The current initiatives section augments the District's baseline inventory by describing the current state of the sustainability program across the focus areas. This section identifies existing programs, best practices, opportunities for program expansion, challenges, and areas for improvement, which are used to inform the recommended strategies. Existing programs or practices that are considered a best practice and are a high priority for expansion Districtwide are marked with a gold star (★).

## RECOMMENDED STRATEGIES

The strategies selected for inclusion in the Sustainability Plan were determined to be key initial opportunities contributing to the achievement of the District's goals. The strategies are comprised of a blend of policy, programming, curriculum, construction, and operations initiatives that consider the District's baseline conditions and industry best practices. While the District's commitments extend through 2030, the strategies are primarily intended to be achievable within the first 5 years of the plan. Additional strategies will need to be identified and considered as the plan matures and the District achieves the strategies outlined in each focus area section.

The strategy recommendations in each section also include detail on the resources needed for implementation, the priority ranking of the strategy, and the key departmental stakeholders who will be involved in implementation.

**Resources Needed:** The *Resources Needed* column identifies the type of resource needed to implement a strategy, and whether that resource is currently funded. This will allow the District to quickly identify the resource allocations needed to implement priority strategies. The resource categories include:

- **Currently Funded** – General Fund, Bond Program, or Staff Time
- **Funding Needed** – General Fund, Bond Program, Staff Time
- **No Additional Funding Needed**

**Priority Level:** The recommended strategies are prioritized for implementation using a ranking system from 1-4, with priority 1 strategies representing the highest priority. Considerations including the necessary order of operations, ease of implementation, educational value, existing policy/programmatic priorities, impact, and cost effectiveness were considered when selecting the priority ranking for strategies. While resource limitations may require that the District prioritize the implementation of strategies across focus areas, the priority ranking reflects priority levels within a specific focus area. These rankings are meant to serve as a tool to help the District strategize and phase the implementation of strategies within a specific topic area.

**Departmental Stakeholder:** The identified *Departmental Stakeholders* will be responsible for working closely with the District sustainability team to strategize, plan, and implement the sustainability strategies. While the Sustainability Department will drive the sustainability program, the District considers sustainability to be a core function for all staff members. Collaboration and buy-in from these key stakeholders will be critical to the success of the plan. Over time, responsibility for the ongoing oversight and maintenance of programs will shift to the responsible District departments/stakeholders.

## PROJECT COSTS AND FUNDING

**MECHANISMS** Recognizing that implementation of the Sustainability Plan will require time and financial resources, this section identifies implementation costs, potential for cost savings, and funding mechanisms specific to each focus area. While actual costs and savings could not be estimated for all of the recommended strategies, case studies were conducted on specific initiatives where information was available in order to estimate the financial benefit of implementation. The Funding Opportunities section identifies grants, support programs, and other funding opportunities that may reduce the District's out of pocket costs and time commitment.

## **PLAN DEVELOPMENT PROCESS**

The Districtwide Sustainability Plan was developed through a collaborative, year-long process comprised of three main phases: Community Engagement, Assessment, and Plan Development. The process included the following steps:

- Gathered existing program and performance data
- Conducted a baseline inventory
- Facilitated stakeholder interviews
- Convened a Districtwide Sustainability Steering Committee
- Facilitated workshops with parents, students, staff, and members of the community
- Assessed existing programs and policies
- Formulated commitments that support the District's sustainability vision
- Developed strategies to support goal achievement

The District's vision for this plan, in combination with the input received through the interviews, workshops, and Steering Committee, informed the development of the District's commitments and implementation strategies. The plan was also informed by local, regional, and national policies, goals, and best practices. Locally, the City of Santa Monica and Malibu sustainability programs and neighboring school districts, such as Los Angeles Unified School District, Culver City Unified School District, and Manhattan Beach Unified School District, were evaluated to ensure goal alignment and identify best practices. Looking beyond the immediate community, the plan also considered regional priorities, state regulations, and national trends. A peer review was conducted on the most successful and robust school district sustainability plans nationwide to identify lessons learned and strategies to replicate.

The top-down and bottom-up approach used to develop this plan also reflects the approach that will be necessary for the District to effectively implement and enforce this plan. Successful implementation will require full vertical integration throughout the District, linking top level leadership with grassroots efforts across daily operations.



# BASELINE + PERFORMANCE INDICATORS

In order to track and assess the District's progress towards sustainability over time, the District has documented baseline conditions and selected key performance indicators for each focus area. The performance indicators define the unit of measure and normalizing factor that will be used to quantify performance on each of the District's commitments. In order to ensure equity and drive improvements across all District sites, the performance indicators measure collective performance Districtwide, rather than site-specific performance. The District's total square footage in each reporting year will be used as a normalization factor in order to provide operational context for sustainability performance. As the District is expected to expand and build additional facilities in the coming years, this normalization factor will allow the District to more accurately compare future performance to the baseline and account for operational changes, such as new facilities, that could otherwise obscure the positive impact of implemented sustainability programs. Despite using normalized metrics as an evaluation tool, the District will set commitments that drive overall reductions in resource use and prioritize climate protection regardless of operational changes. The District's key performance indicators are detailed in each section of this plan and a full list can be found in the Appendix.

The District's baseline establishes a record of performance under existing conditions using the selected key performance indicators. The baseline will be used as a comparative evaluation tool to assess the District's progress in each focus

area from year to year. To develop the baseline, the District collected performance data, compiled information on existing practices, and developed quantitative baseline inventories for the following focus areas: Energy, Water, Solid Waste, and Transportation. The 2017-18 fiscal year (July 1st – June 30th) was used as the baseline year, as it was the most recent year for which complete data was available and it captures the District's previous efforts to improve performance.

Quantitative baseline inventories were only established for areas with existing, available data, but additional qualitative baseline information is included in the Current Initiatives section of each focus area chapter. While climate protection and reducing greenhouse gas emissions are primary goals of this plan, a baseline for the District's GHG emissions has not been established. It is recommended that the District conduct a robust GHG emissions inventory in order to establish a climate baseline as the first step towards implementation. Establishing baseline inventories for the other performance indicators included in this plan have been included as priority strategies to support program development and implementation.

The District's 2017-18 baseline inventory is summarized below. A full breakdown of baseline performance by District site can be found in the Appendix.

SUSTAINABILITY FOCUS AREA	PERFORMANCE INDICATOR	BASELINE
Energy Efficiency + Renewables	Electrical Consumption	9,291,636 kWh 5.74 kWh/ft <sup>2</sup>
	Natural Gas Consumption	244,056 Therms 0.15 Therms/ft <sup>2</sup>
	Energy Use Intensity	19.69 kBtu/ft <sup>2</sup>
	Onsite Solar Production	1,179,710 kWh
	Percent Onsite Solar Production	13%
Water	Water Used	48,395,836 gallons 29.89 gallons/ft <sup>2</sup>
Solid Waste	Total Waste Generation	4,194,300 lbs. 2.59 lbs./ft <sup>2</sup>
	Diversion from Landfill	23.5%
Transportation	Drive Alone Rate	68%
	Staff Average Vehicle Ridership (AVR)	AM Peak: 1.137 PM Peak: 1.138



# CLIMATE



# CLIMATE

Recognizing that climate change is real and mobilizing action is urgent, the District is committed to minimizing its climate impacts through the adoption and expansion of comprehensive policies, programs, and operational practices that reduce greenhouse gas emissions, resource consumption, and pollution. While climate is just one of eight focus areas addressed in the Sustainability Plan, climate protection is the primary goal of the District's sustainability strategy and is a central consideration driving strategy selection and implementation. The climate protection goals and performance indicators are intended to serve as the common metric through which the District's efforts across all focus areas are measured and reported. This approach will allow the District to quantify the cumulative climate benefits of its sustainability program and will also provide the District with a mechanism for benchmarking against peers and aligning its goals with state, federal, and international climate goals.

The District has not conducted a greenhouse gas (GHG) inventory in order to baseline its emissions and climate impacts, so it is critical that the District undertake a robust inventory as the first phase of implementation for the Sustainability Plan. Based on the results of the inventory, the District will establish GHG reduction goals and programmatic targets for 2025 and 2030. The District is actively involved in

## PERFORMANCE INDICATORS

### METRICS



#### Greenhouse Gas Emissions

*Tons of CO<sub>2</sub> equivalent emissions produced annually.*

the City of Malibu and Santa Monica climate action planning efforts and should align its GHG reduction goals and strategies with local city priorities. Additionally, the District should take direction from local cities on climate adaptation and resiliency planning. The District should update its existing disaster and emergency preparedness plans as well as its design specifications to integrate climate resiliency considerations that will prepare the District for a more uncertain future. It is also recommended that the District develop and adopt a climate action plan that identifies potential risks and mitigation measures. The District should continue searching out public and private partnership opportunities that support District action on climate issues and advance local resiliency.

## PROGRAM MISSION

Establish a baseline for the District's climate impacts and pursue climate neutrality by reducing greenhouse gas emissions, resource consumption, and pollution contributing to climate change.

## GOALS

2020

- Complete a Districtwide GHG inventory of scopes 1, 2, and 3 emissions and adopt reduction goals for 2025 and 2030.
- Update the District's Disaster and Emergency Plans to include climate resiliency considerations.

2025

- Achieve the GHG reduction goals for 2025.
- Adopt a Districtwide Climate Action Plan.

2030

- Achieve the GHG reduction goals for 2030.



# **EDUCATION + ENGAGEMENT**



# EDUCATION + ENGAGEMENT

The District recognizes that schools play a critical role in educating students about the importance of the environment and in preparing them to be stewards of the natural world. Therefore, the District's sustainability plan emphasizes education and engagement efforts that further environmental literacy, inspire behavior change, and will develop the next generation of environmental stewards. The District also recognizes that the education and engagement of District stakeholders will play a significant role in helping the District achieve its sustainability program goals. The Education and Engagement strategies focus on integrating formal sustainability education into the curriculum; developing co-curricular and extra-curricular activities and programs that encourage interest in this subject matter; and engaging students, teachers, staff, and parents in the District's climate protection and sustainability efforts.

## PROGRAM MISSION

To educate the next generation of environmental stewards, increase the environmental literacy of the District community, and inspire action to promote sustainability.

## PERFORMANCE INDICATORS

### METRICS



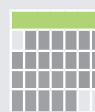
#### Sustainability in the Curriculum

*The percentage of courses that include sustainability course work and/or learning outcomes.*



#### Sustainability Literacy

*Specific metrics to be developed by 2025.*



#### Engagement Events

*The number of sustainability education and engagement events hosted annually by the District.*



#### Professional Development for Teachers

*The percentage of teachers receiving training to support the teaching of sustainability curriculum.*

## GOALS

### ONGOING

- Provide professional development opportunities on sustainability concepts for educators.

### 2020

- Fully implement the Next Generation Science Standards Curriculum.
- Establish a baseline for existing efforts to integrate sustainability into lesson plans and classroom activities.
- Adopt Board Policy BP 6142.5 (a) – *Environmental Education*.
- Adopt a District policy, definition, vision, and goal for sustainability literacy.
- Expand the Water Conservation Education Program to include 3<sup>rd</sup> grade and 4<sup>th</sup> grade.

### 2025

- Achieve the Year-5 sustainability literacy goal.
- Implement two additional co-curricular education programs on targeted sustainability topics.
- Each school to implement at least 3 extra-curricular sustainability programs per year.

### 2030

- Achieve the Year-10 sustainability literacy goal.

# CURRENT INITIATIVES



## 1 NEXT GENERATION SCIENCE STANDARDS

In 2016, the District approved the adoption of the California Next Generation Science Standards (NGSS), which include environmental education and sustainability content as part of the core curriculum. The District's approach to environmental education takes direction from the NGSS approach of embedding these concepts within the curriculum to augment and support all learning outcomes. The new NGSS standards will align the District's program with the current California standards and will formalize the District's sustainability education program. A phased implementation plan is under development outlining a roadmap and the resources needed to implement the NGSS. As part of this process, the District will select curriculum materials that feature sustainability concepts and develop resources that support teaching on this subject matter, such as professional development and curriculum guides. The District will also develop a sustainability literacy policy and goal to track learning outcomes on these subjects. As additional testing and evaluation frameworks will be needed for assessment, this commitment will be in development for planned implementation in 2025.

## 2 EDUCATIONAL SPECIFICATIONS

In addition to establishing new curriculum requirements, the District updated its Educational Specifications in 2018 to support healthier classrooms and the expansion of environmental education and sustainability learning outcomes. The District's Educational Specifications define the criteria and physical building requirements for new construction and modernization efforts to ensure that all learning facilities fulfill the needs of the District's education programs and support student achievement. The updated Educational Specifications support the implementation of this sustainability plan and new environmental education programs by including requirements for functional kitchens, teaching gardens, green building and efficiency strategies, and other facilities that support aspects of the District's sustainability program. These new specifications represent a critical step toward institutionalizing sustainability within the District and aligning the District's infrastructure with the needs of an environmental education program.

## 3 ★ SCHOOL GARDENING PROGRAM

The Garden Education Program is a co-curricular program for K-5th grade students that supplements classroom learning through six hands-on gardening sessions across the academic year. Integrating with the curriculum, the program teaches students scientific knowledge about plant life, insects, food, and nutrition. The program was created at Grant Elementary by parent volunteers and will be expanded to all elementary schools as part of the sustainability program. While almost all schools in the District have existing gardens, they are in need of repair and improved management. Garden revitalization plans are being developed to identify needs and management strategies that will enable these spaces to provide maximum teaching value.



## 4 ★ WATER CONSERVATION EDUCATION PROGRAM

Through a partnership with the City of Santa Monica, City of Malibu, and Discovery Cube of Discovery Science Foundation, the District has developed and implemented a co-curricular Water Conservation Education Program for the Districts' 5th Grade students. This program addresses four focus areas within the Next Generation Science Standards for 5th grade and covers these key topics:

1. The Earth's Water Sources
2. The Water Cycle
3. Conservation of Water
4. Preservation of Water

The program provides teachers with modules covering important water-related topics, such as the lifecycle of water and the importance of conservation, to be delivered at grade-specific assemblies. After the assemblies, teachers and

students receive an educational booklet that was designed specifically to target SMMUSD learning goals and the conservation goals of both cities. The Booklet targets the specific landscape, climate, and marine regions of Santa Monica and Malibu and emphasizes the importance of learning about water conservation. The District plans to expand the program to include 3rd and 4th grade students in the coming years. Opportunities to develop similar programs on additional topics will be explored as part of the environmental education program.





## 5 ★ EXTRA-CURRICULAR ENGAGEMENT PROGRAMS

In an effort to encourage student exploration and participation in sustainability, the District is also supporting extra-curricular sustainability education and engagement programs that provide students with opportunities to take action and develop leadership skills.

### *Grades of Green School Programs*

Several schools in the District are participating in programs offered by the organization Grades of Green, which integrate sustainability education into daily school routine. Grades of Green program offerings such as the Trash Free Lunch Program, Water Refill Stations, and in-classroom workshops have been implemented on a site by site basis by staff or parent champions. In order to provide these opportunities to all students, the District will explore mechanisms to support and encourage participation in these programs across all schools.

### *Grades of Green Youth Corps Program*

The Grades of Green Youth Corps Program pairs 4th – 12th grade students in the Los Angeles area with a mentor that supports them with implementing a project throughout the course of the academic year. In recent years, four Franklin Elementary School students and a student at Lincoln Middle School have been selected to be part of Green of Grades Youth Corps Program. Additionally, 120 science students from Santa Monica High School are conducting sustainability projects with Grades of Green mentors. These projects drive lasting, sustainable change on each campus and across the District, while developing valuable leadership skills.

### ★ *Energy Education Programs*

Several extra-curricular energy education programs have been implemented to educate both students and staff on energy conservation strategies and the impact of energy consumption on the environment. These programs include the biannual Energy Competition, the Energy Detectives program, and the Continuous Energy Initiative Behavior Program, which are discussed in more detail in the Energy section of this plan. Programs on additional topic areas should be considered for future development.




*Please join us...*

**Opening ceremony of Branching Out: A Student Learning Nursery at Santa Monica High School**



**When:** Tuesday September 18<sup>th</sup> at 3:30-5:30

**Where:** SW Corner of Football Field, Santa Monica High School 601 Pico Blvd Santa Monica

**Join:** Meet the Gardening Club, help plant the first round of sycamore trees and get involved!

**Wear your gardening gear!**

Branching Out is the student maintained tree and plant learning nursery on campus that will grow and care for the trees being planted throughout all phases of the 25 year Campus Plan. The nursery will be used by the science related courses and will root the students and the community within Samohi campus and future building projects for long-term engagement and school spirit.

**Contact:** Molly McGee, Gardening Club Leader [mollymcgee914@gmail.com](mailto:mollymcgee914@gmail.com), Catherine Baxter, Dean of Students [cbaxter@smmusd.org](mailto:cbaxter@smmusd.org) or Caroline Coster, Sustainability, Coordinator [ccoster@smmusd.com](mailto:ccoster@smmusd.com) for coordination questions







# RECOMMENDED STRATEGIES

The recommended strategies targeting sustainability education and engagement seek to integrate sustainability at a fundamental level into the District’s curriculum content, so as to ensure equity in learning outcomes across the District and support the whole-child approach to education. The strategies support the adoption of the NGSS and the integration of environmental education into the curriculum, associated resources, and assessment tools. The strategies also include recommendations for furthering sustainability education through co-curricular and extra-curricular programs that support what is being learned in the classroom, while encouraging deeper engagement and action on the subject matter. Recognizing that Districtwide engagement and awareness of the sustainability program and goals will be critical to the success of the program, strategies for engaging key stakeholders and promoting the sustainability program broadly across the District have also been recommended.

\*While the District Sustainability Department will be responsible for leading the implementation of the Sustainability Plan and all recommended strategies, the identified departmental “Key Stakeholders” will be responsible for working closely with the District sustainability team to strategize, plan, and implement the recommended sustainability strategies. The District considers sustainability to be the responsibility of all staff members, so collaboration and buy-in from these key stakeholders will be critical to the success of the plan.

RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Curriculum Standards</b>			
Conduct Principal surveys to gather information on existing efforts to integrate sustainability into lesson plans and classroom activities. Use this information to establish a baseline for the environmental education program.	Funding Needed: Staff Time	1	Educational Services, Principals, Teachers
Create a part-time Environmental Education Coordinator position within the Educational Services department responsible for integrating sustainability efforts and programs into the curriculum and NGSS.	Funding Needed: General Fund	1	Educational Services
Work with the Science Leadership Team to develop a strategy and workplan for highlighting sustainability concepts within the NGSS curriculum and resources.	Currently Funded: Staff Time	1	Educational Services
Include environment and sustainability relevance as a criterion in the NGSS support materials evaluation checklist.	Currently Funded: Staff Time	1	Educational Services
Conduct research on sustainability literacy goals and assessment programs.	Funding Needed: Staff Time	2	Educational Services
Establish a working group with Educational Services, Principals, the Science Leadership Team, and other key stakeholders to develop a District definition and vision for environmental literacy.	Funding Needed: Staff Time	2	Educational Services, Principals
Identify and highlight environmental and sustainability components of the NGSS as part of the implementation plan.	Currently Funded: Staff Time	2	Educational Services
Update and officially adopt Board Policy 6142.5(a) - Environmental Education to include the District’s vision for environmental literacy and to formalize the District’s commitment to sustainability and environmental education.	Funding Needed: Staff Time	2	Educational Services
Add a symbol to the curriculum guides that identifies courses that contain sustainability content and learning outcomes.	No Additional Funding Needed	3	Educational Services
Integrate educator resources on sustainability and the environment into the curriculum guides.	Currently Funded: Staff Time	3	Educational Services
Develop professional development courses for the NGSS implementation that focus on environmental literacy, sustainability concepts, and regional environmental issues.	Funding Needed: General Fund	3	Educational Services

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Curriculum Standards</b>			
Develop a sustainability literacy evaluation framework and performance goals.	Funding Needed: Staff Time	4	Educational Services
Evaluate the need for ongoing Science Leadership Team involvement beyond 2020 and associated costs.	Funding Needed: General Fund	4	Educational Services
Subscribe to the USGBC Learning Lab resource for educators: <a href="https://learninglab.usgbc.org/home">https://learninglab.usgbc.org/home</a>	Funding Needed: General Fund	4	Educational Services
<b>Co-Curricular Education Programs</b>			
Work with the City of Santa Monica, Malibu, and Educational Services to develop a timeline and implementation plan for expanding the Water Conservation Education Program to 3rd and 4th grade students.	Currently Funded: Staff Time	1	Educational Services
Create and implement sustainability focused orientation programs and trainings at the beginning of each school year. Tailor the programs to be school specific and age appropriate.	Funding Needed: Staff Time	1	Principals, Educational Services
Work with Educational Services and the Environmental Education Coordinator to develop sustainability content for integration into high school freshman seminars.	Funding Needed: Staff Time	2	Educational Services
Develop tailored garden revitalization plans for each school that identify the resources and management structures needed to support the on-going health of the District's school gardens and the Farm to Desk Garden Education program.	Funding Needed: Staff Time	2	Principals, Teachers
Create a Garden Coordinator position for each school pathway to manage the gardens and the Garden Education program.	Funding Needed: General Fund	2	Educational Services, Principals
Pursue school garden grant opportunities to support the ongoing management of the gardens and the Garden Education program.	Funding Needed: Staff Time	3	Educational Services, Principals
Work with Educational Services to promote and incentivize participation in voluntary co-curricular Garden Education programs.	No Additional Funding Needed	3	Educational Services, Principals
Evaluate the Pulitzer Climate Change Curriculum and other relevant co-curricular education programs to determine feasibility of implementation. Climate Change Curriculum: <a href="http://pulitzercenter.org/nytclimate">http://pulitzercenter.org/nytclimate</a>	Funding Needed: Staff Time	4	Educational Services
<b>Extra-Curricular Education Programs</b>			
Develop a menu of available extra-curricular programs, such as the Grades of Green programs, and promote to schools for implementation. Allow schools to select which programs they want to implement.	Currently Funded: Staff Time	1	Principals
Provide sustainability resources and environmental justice information to the District's cultural student clubs. Engage with these clubs to conduct outreach and education on environmental justice issues.	Currently Funded: Staff Time	2	Educational Services
Provide informational resources and links to extra-curricular and community programs on the District sustainability website.	Currently Funded: Staff Time	3	Communications

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Engagement Strategies</b>			
Coordinate with the District's social media accounts to promote sustainability programs and accomplishments.	No Additional Funding Needed	1	Communications
Develop an online newsletter for the sustainability program that includes updates, facts, photos, and upcoming events to be distributed Districtwide twice a month.	Currently Funded: Staff Time	1	Communications
Develop "Green Teams" at each school and engage the District's Principals to serve as sustainability champions for their schools to promote the adoption of sustainability educational programs.	No Additional Funding Needed	2	Principals
Develop a new staff orientation program and a bi-annual staff training program focused on sustainability.	Funding Needed: Staff Time	2	Principals
Provide all students and parents with information on the District's sustainability program and goals at the start of each academic year.	Currently Funded: Staff Time	3	Communications
Challenge all schools in the District to host a minimum of 3 sustainability programs or events per academic year (not including Districtwide events).	Funding Needed: General Fund	3	Principals, Teachers
Develop a Districtwide network of student clubs and organizations focused on sustainability. Promote peer-to-peer sustainability education and programming by providing advice and guidance to these groups and leverage this network to disseminate sustainability program information.	Currently Funded: Staff Time	4	Principals, Students
Evaluate the viability of participating in the Green Apple Day of Service to promote sustainability and advance school-based sustainability projects: <a href="http://greenapple.org/">http://greenapple.org/</a>	Funding Needed: Staff Time	4	Principals



\*Implementation strategy includes use of grant funds for materials, equipment, or labor.

# PROJECT COSTS AND FUNDING MECHANISMS



## **PROGRAM COST SAVINGS**

While the strategies identified for the education and engagement program have no direct cost savings potential for the District, they will develop awareness of resource conservation and sustainability concepts, which will enhance the cost saving potential of other sustainability programs such as energy, water, and solid waste.



## **IMPLEMENTATION COSTS**

Developing student education programs, curriculum materials, professional development opportunities for teachers, and assessment tools are core and on-going functions of the school District. As such, there is no additional cost to ensuring that sustainability and the environment are targeted as key learning areas. The District should ensure that these considerations are integrated as part of the standard curriculum evaluation and material development process so that additional resources are not needed to develop the environmental education program. Unlike academic programs, however, the development and implementation of sustainability engagement programs do not live within a single department and will require additional staff time at both the District and individual school levels. The District should explore strategies to support these programs and remove barriers to participation.

# PROJECT COSTS AND FUNDING MECHANISMS



## FUNDING OPPORTUNITIES

Grants and other funding opportunities may be available to the District to support the implementation of the education and engagement program. Potential funding opportunities should be explored on a case by case basis during the planning and development of a new program. Additionally, the District should monitor opportunities to obtain funding support for ongoing programs, such as the school gardens. For example, the USDA Farm to School grant program should be evaluated as a potential funding source to support the District's school gardening and sustainable food programs.

Funding availability may change over time as programs are expended and new programs become available. The District should use the Green Schools Alliance Resource Center search tool to search for grants and funding opportunities by topic.

### AVAILABLE GRANTS:

<https://www.greenschoolsalliance.org/resources/category/1>

<https://www.fns.usda.gov/farmtoschool/farm-school-grant-program>



# **ENERGY EFFICIENCY + RENEWABLES**



# ENERGY EFFICIENCY + RENEWABLES

The generation of electricity and subsequent consumption of energy in buildings represents the single largest source of greenhouse gas emissions in the U.S. Acknowledging this reality, the District strives to minimize the environmental impacts of the District’s energy needs through an integrated approach of energy conservation, efficiency measures, effective energy management, and the transition to clean, renewable energy systems. The District’s energy program addresses all aspects of energy use within the District’s facilities, including electricity, natural gas, and renewable energy systems, to identify opportunities for energy use and utility cost reductions and to increase the use of onsite, renewable energy. Additionally, the energy program strives to educate students and staff on the importance of energy efficiency and renewable energy while promoting behavior change and providing tangible actions they can take to help the District achieve their energy goals.

## PROGRAM MISSION

Minimize the use of energy resources, convert to clean, renewable energy sources, and redirect financial resources towards student learning and sustainability initiatives.

## PERFORMANCE INDICATORS

### METRICS



**Electrical Consumption**  
*Total kilowatt-hours of electricity consumed annually.*



**Natural Gas Consumption**  
*Total therms of natural gas consumed annually.*



**Energy Use Intensity**  
*Combined electricity and natural gas consumed in kBtu per square foot.*



**Onsite Solar Production**  
*Kilowatt-hours of electricity supplied annually by solar.*



**Percent Onsite Solar Production**  
*Percent of total District electrical consumption supplied by onsite solar.*

## GOALS

ONGOING	2020	2025	2030
<ul style="list-style-type: none"><li>• Comply with all local, regional, state, and federal energy regulations.</li><li>• Monitor and track performance monthly.</li><li>• Promote student and staff participation in energy conservation behavior.</li></ul>	<ul style="list-style-type: none"><li>• Reduce energy consumption by 20% compared to 2017-18 baseline.</li><li>• Generate 20% of the District’s electrical need from solar.</li><li>• Transition all District sites to 100% renewable electricity through the Santa Monica and Malibu Clean Power Alliance.</li></ul>	<ul style="list-style-type: none"><li>• Reduce energy consumption by 25% compared to 2017-18 baseline.</li><li>• Generate 30% of the District’s electrical need from solar.</li></ul>	<ul style="list-style-type: none"><li>• Reduce energy consumption by 30% compared to 2017-18 baseline.</li><li>• Generate 35% of the District’s electrical need from solar.</li></ul>

# CURRENT INITIATIVES



# 1

## CONTINUOUS ENERGY IMPROVEMENT PROGRAM

The District is participating in the Continuous Energy Improvement Program (CEI) in partnership with Southern California Edison (SCE) and the Southern California Gas Company. CEI is a consultative service aimed at helping commercial customers engage in long-term, strategic energy planning. The District has partnered with consulting firm Ecova to develop an energy plan, establish energy goals and targets, and implement behavioral change programs. Through this program, the District developed a Strategic Energy Management Plan (SEMP) outlining its energy strategy and goals. The objectives set forth by the District in the SEMP are as follows:

- Track, monitor and report District progress, and identify trends and opportunities for savings;
- Create a sense of responsibility among students, teachers, staff, administrators, parents and community members with regard to energy consumption
- Operate at optimal efficiency and avoid unnecessary costs associated with reactive maintenance practices and procedures;
- Reduce future energy costs in new facility construction and renovation whenever feasible;
- Reduce our District's overall environmental impact and provide a healthier and safer educational environment.
- Performance and the setting of future goals will be evaluated on an annual basis.

It is recommended that the District formally adopt the SEMP to guide its energy management strategy and establish future goals targeting energy resilience that will allow the District to continue educating students and providing key services to the community in the face of energy outages.



# 2

## ENERGY MANAGEMENT PROGRAM

In support of the District's commitment to energy management, the District used Proposition 39 funds to acquire professional energy management and reporting services. The District's Energy Manager is responsible for evaluating the District's energy use and implementing energy policies, strategies, programs, and efficiency measures that "help conserve our society's natural resources and save money to support other district needs" (Board Policy 3511 – Energy and Water Conservation). As a first step, Districtwide energy audits were completed, identifying existing systems and potential efficiency measures for future implementation. The Energy Manager is also responsible for conducting semiannual site inspections and utility bill analysis. The site inspections are coordinated with classroom energy lessons to teach students and faculty about energy efficiency in practice. It is critical that the District maintain its commitment to energy management services in order to drive continuous improvement.



Percent of Expected Solar Production



This metric is a ratio of the total solar generation produced and the total solar generation expected.

# CURRENT INITIATIVES



3

## ONSITE SOLAR

The District has a longstanding commitment to renewable energy and the use of photovoltaic solar panels. In 2010, the District signed a Power Purchase Agreement (PPA) to add solar to 9 elementary school campuses. These clean-energy systems currently provide 13% of the District's electricity needs. In 2017 the District initiated a project to expand onsite solar generation and install solar systems on two District school sites that were built "solar ready" through the Measure BB bond: Santa Monica High School and Edison Elementary School. When combined with the District's existing solar production, these systems have the potential to generate up to 19% of the District's total electricity needs when they are complete in 2019. To improve the District's energy resilience and offset peak demand charges, the District will explore the feasibility of integrating energy storage into this and future solar projects. This project will play an important role in helping the District meet its renewable energy goals and reduce greenhouse gas emissions.

4

## LED LIGHTING RETROFITS

A key finding resulting from the District energy audits was that all 18 District sites could realize substantial energy savings by replacing their existing lighting systems with LED lighting. This project alone will yield an estimated 1.7 million kWh savings per year, which equates to a more than 15% reduction in Districtwide energy usage. Converting to LED lighting will reduce the District's maintenance burden, due to their long life, and will provide greatly improved quality and quantity of light. This project was initiated in 2017 and is on track for completion by 2019.



5

## FOOD SERVICES EQUIPMENT REPLACEMENT

The District's kitchens and food service equipment were identified as a major opportunity for energy reduction and efficiency. The District took advantage of SCE's free services to conduct an audit of all existing food service equipment to identify potential energy efficiency measures and eligibility for utility incentives. The District is in the process of developing a comprehensive Food Services modernization plan, which includes the findings and recommendations from the audits for efficiency measures and equipment replacement. These updates are expected to reduce the District's natural gas consumption and greenhouse gas emissions.



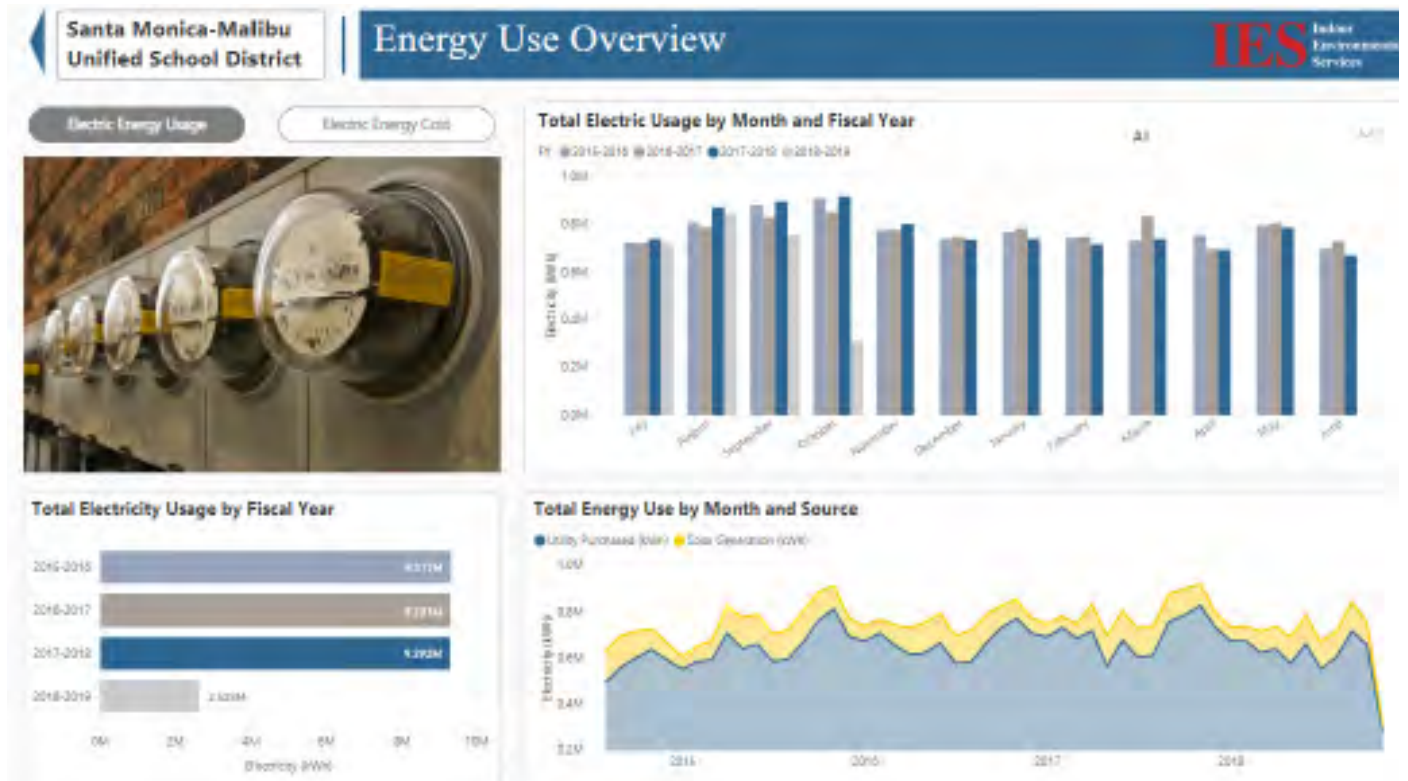
## 6

### ENERGY TRACKING AND MONITORING

Energy consumption tracking and monitoring is the first step to developing an energy management program. Recognizing this, the District has developed systems that allow for robust tracking and monitoring of energy consumption, cost, and performance on a regular basis. The information and analytics supplied by these systems not only inform the District's energy management and efficiency projects, but they can be communicated to key stakeholders to build accountability and drive behavior change. In 2018 the District implemented two key initiatives designed to provide structured monitoring and communication of energy consumption to support the energy program.

**Monthly Energy Reports:** In partnership with the Energy Manager, the District developed a monthly energy report to provide regular status updates on energy consumption and performance at each District site and collectively Districtwide. Prior to the creation of the energy report, analysis on energy consumption, performance, and cost was not conducted regularly, and the information was not shared with the District community. The monthly energy reports are distributed to school principals, facilities staff, administrators, and other key points of contact in order to spread awareness and build accountability for energy consumption at the site level. The monthly energy reports will be an important tool to help the District monitor consumption and prioritize efficiency projects based on impact.

**Energy Dashboard:** Energy dashboards provide live access to energy consumption trends and analytics in a visualized format, making them a useful tool for tracking and monitoring energy consumption in real time. The District launched an energy dashboard in 2018 to allow all District stakeholders to access energy consumption information. The dashboard is embedded in the District's website for maximum visibility and impact. Additionally, the District will explore ways to utilize the dashboard as a tool in their education programs.






## 7 CONSERVATION AND BEHAVIOR CHANGE PROGRAMS

The District has developed and implemented several energy education and behavior change programs designed to engage the District’s students and staff in energy conservation efforts.

- ★ **CEI Behavior Program:** The CEI Behavior Program was developed in fall 2017 as a communications campaign to drive behavior change and provide District staff and students with information and tips on saving energy. As part of this program, Custodians and District staff were provided with a checklist of energy conservation measures to implement at the end of each day and prior to holiday closures. Custodians were trained to follow this checklist and turn lights on/off in zones rather than leaving all lights turned on during their rounds. Additionally, energy tips and program information have been integrated into the Districtwide “Friday Memo,” which is distributed to teachers, principals, upper staff, the Board of Education, and Senior Cabinet on a weekly basis. Comparisons of energy consumption by site provide feedback on performance and incentivize participation. This program will be continued and expanded in future years.
- ★ **Energy Detective Program:** The Energy Detective program engages students as hands-on advocates for energy conservation. Teachers appoint interested students to be classroom “Energy Detectives” and provide checklists of actions that students can find and implement to save energy, such as turning off lights and electronics at the end of the day. The Energy Detective program represents a best practice and should be promoted at all school sites.
- ★ **Energy Competition:** The District hosted their first annual Energy Competition in fall 2018, which uses friendly competition to encourage students and staff to participate in energy conservation efforts. Competitions will be held annually in both the fall and spring to teach energy conservation behaviors and drive continual improvement.




### Will Rogers Energy Detectives Classroom Energy Saving Checklist

AT END OF EACH DAY and WHEN NOT IN USE:

- Shut OFF Lights
- Shut OFF Computers [screen savers use energy]
- Shut OFF Smart Board
- Shut OFF Fan
- Shut OFF Heater and AC
- Shut OFF Projector
- Shut OFF Tablets
- Close Windows
- Close Blinds
- Close Doors



Can you find what’s using energy in your classroom?



Energy Detective: \_\_\_\_\_

Teacher: \_\_\_\_\_

Grade: \_\_\_\_\_ Date: \_\_\_\_\_



# RECOMMENDED STRATEGIES

The recommended strategies for the energy program address the findings and recommendations from the District's energy audits and program assessments and are aligned with the District's Strategic Energy Management Plan. They also include recommendations for education and training programs needed to maintain efficiency overtime. As such, these strategies provide a comprehensive roadmap for energy conservation, efficiency, and renewable energy programs across the District.

\*While the District Sustainability Department will be responsible for leading the implementation of the Sustainability Plan and all recommended strategies, the identified departmental "Key Stakeholders" will be responsible for working closely with the District sustainability team to strategize, plan, and implement the recommended sustainability strategies. The District considers sustainability to be the responsibility of all staff members, so collaboration and buy-in from these key stakeholders will be critical to the success of the plan.

RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Energy Efficiency Measures</b>			
Formally adopt the Strategic Energy Management Plan.	No Additional Funding Needed	1	Board of Education
Develop an implementation plan outlining a timeline and strategy for implementing and enforcing the strategies identified in the District's Strategic Energy Management Plan.	Currently Funded: Staff Time	1	M+O
Conduct Facility Condition Assessments of all facilities in order to identify and prioritize all efficiency/upgrade opportunities and determine future project scopes for facility upgrades, repairs, and modernization projects.	Funding Needed: General Fund	1	M&O
Complete the assessment of District food service facility efficiency opportunities and prioritize equipment replacement base on energy reduction potential.	Currently Funded: Bond Program & General Fund	1	Food Services, M+O
Continue to install occupancy sensors in all classrooms and offices to allow lights to be shut off when unoccupied.	Currently Funded: Prop 39	1	M&O
Establish lighting and equipment efficiency standards for all new equipment that meet or exceed Title 24 standards.	Currently Funded: Staff Time	2	FIP, Purchasing
Replace existing lighting with LEDs at all District sites.*	Currently Funded: Prop 39	2	M+O
Develop a replacement plan for the existing food service equipment at each of the schools, prioritized based on energy reduction potential.	Currently Funded: General Fund	3	M+O, Kitchen Staff
Install variable frequency drives on existing pool pumps to allow them to reduce their speed when not in use.	Funding Needed: General Fund (M&O)	4	M+O
Conduct an assessment of boilers and unit heaters to identify efficiency opportunities. Prioritize units for replacement and replace with Title 24 or better efficiency heating equipment.	Funding Needed: General Fund (M&O)	4	M+O
<b>Renewable Energy</b>			
Install solar PV on the District sites included in the solar Phase 1 project scope.	Currently Funded: Bond Program	1	Facility Improvement Projects
Evaluate the feasibility and energy resiliency benefits of integrating energy storage systems into the solar Phase 1 projects.	Funding Needed: Bond Program	1	Facility Improvement Projects

\*Implementation strategy includes use of grant funds for materials, equipment, or labor.

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Renewable Energy</b>			
Prioritize the solar Phase 2 project sites for implementation based on energy generation potential and storage potential.	Funding Needed: Bond Program	1	Facility Improvement Projects
Establish a District standard that all future solar projects include energy storage systems, where feasible.	Funding Needed: Bond Program	2	Facility Improvement Projects
Conduct an assessment of remaining District sites to identify locations with the greatest potential for onsite solar generation, solar thermal, and energy storage. Prioritize sites for implementation.	Funding Needed: Bond Program	2	Facility Improvement Projects
Establish a District standard that all pool modernization projects and/or new construction include specifications for solar thermal heating systems.	Funding Needed: Bond Program	3	Facility Improvement Projects
<b>Energy Management</b>			
Maintain the District's Energy Star Portfolio Manager Account and utilize the built-in tools to perform benchmarking of all District sites on a quarterly basis.	Currently Funded: Bond Program	1	Energy Manager
Perform semiannual energy audits to identify potential energy efficiency measures and ensure that installed measures are functioning as intended.	Funding Needed: Staff Time	1	M+O
After 1st year, normalize the energy baseline for sites where HVAC units were installed to allow for accurate performance tracking.	Currently Funded: Bond Program	1	Energy Manager
Install Title 24 compliant or better HVAC units for District sites that require cooling.	Currently Funded: Bond Program	2	M+O, Principal, Teachers
Install wireless thermostats for new HVAC units to allow District to implement energy saving strategies, such as thermostat lockout temperatures and occupied/unoccupied scheduling.	Funding Needed: Bond Program & M&O	2	M+O, District Staff
Evaluate the value of participating in SCE's HVAC optimization program for sites receiving new HVAC systems.	No Additional Funding Needed	2	M+O
Install energy management systems (EMS) for remaining school sites (existing EMS at Santa Monica High School and Edison) to allow control at both the site and District level. Connect wireless thermostats to the EMS system.	Funding Needed: General Fund (M&O)	3	M+O, District Staff

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Energy Management</b>			
Implement building controls using EMS such as temperature resets and scheduling.	Funding Needed: General Fund & Staff Time (M&O)	3	M+O, District Staff
Tie existing EMS at Santa Monica High School and Edison into the central EMS described above so District can control all sites from a singular point.	Funding Needed: General Fund (M&O)	4	M+O, District Staff
Evaluate and implement energy resiliency strategies using the District EMS system.	Funding Needed: General Fund (M&O)	4	M+O, District Staff
Develop a periodic maintenance schedule and ensure that the following is established for each piece of equipment in the District's inventory: <ul style="list-style-type: none"> <li>Maintenance schedule</li> <li>Checklist of maintenance needs</li> <li>Documentation process of maintenance activities</li> </ul>	Funding Needed: General Fund & Staff Time (M&O)	4	M+O
<b>Education and Engagement</b>			
Establish an Energy Team at each school site comprised of Principals, Custodians, Food Service, Teachers, Parents, Students, Athletic Directors, and Volunteers.	Funding Needed: Staff Time	1	District Leadership
Develop a monthly energy "Report Card" to communicate monthly energy consumption and performance to each school. Distribute to Principals and other key points of contact.	No Additional Funding Needed	1	Principals
Engage school Principals in promoting the "Energy Detectives" and biannual Energy Competition programs to all sites and grade levels.	No Additional Funding Needed	1	Teachers, Principals
Explore opportunities to integrate the energy dashboard into the District's education and experience-based learning programs.	Funding Needed: General Fund	1	Teachers, Principals
Provide energy conservation tips and information on the energy program on the District's website.	No Additional Funding Needed	2	Communications
Develop educational content for students and teachers to be implemented in conjunction with classroom site audits. Work with the Science Leadership Team to align content and timing with the curriculum.	Funding Needed: General Fund	2	Teachers, Principals
Train M+O staff on the Energy Management Systems.	No Additional Funding Needed	3	M+O
Include maintenance and operations training for M+O staff as part of the procurement process for all new equipment.	No Additional Funding Needed	3	Procurement, M+O

# PROJECT COSTS AND FUNDING MECHANISMS



## IMPLEMENTATION COSTS

Implementation of the energy program will require capital investments from the District to cover material costs such as energy efficiency equipment and energy management systems, as well as the ongoing labor to maintain these systems. However, existing operational and capital budgets should be leveraged to fund these programs by specifying high efficiency equipment and systems during planned replacements and modernization projects.

## PROGRAM COST SAVINGS

Nearly all of the recommended energy program strategies will contribute to a reduction in the District's operations and maintenance costs through a reduction in purchased energy. These efforts will help the District ensure that funds intended for student learning are not diverted to cover high energy costs. The implementation of energy efficiency measures will also allow the District to hedge against future utility rate increases and realize additional operational cost savings, which can be redirected towards funding energy efficiency and renewable energy projects in the future. The District's energy program should also focus on building energy resilient infrastructure that will allow the District to continue operating in the face of a grid outage. Cost savings from efficiency measures may be redirected to offset these investments, which don't have direct cost savings, but will provide critical operational benefits to the District.

## CASE STUDY

By replacing all existing lighting across the District with LED lighting, the overall energy usage for the District can be reduced by approximately 1.7 million kWh. This is more than a 15% reduction in Districtwide energy usage. This will also lead to an increase in the percent of the District energy provided by onsite solar generation without the installation of new solar.

At an average rate of \$0.16 per kWh, this project will **save the District an estimated \$272,000 annually in electricity charges.** Additional savings may be realized through a reduction in the District's annual demand charges.

# PROJECT COSTS AND FUNDING MECHANISMS



## FUNDING OPPORTUNITIES

Grants and incentive programs should be pursued to minimize the out-of-pocket cost to the District for energy efficiency and renewable energy projects. The District's utility service providers, Southern California Edison and the Southern California Gas Company, offer utility rebate and incentive programs to help lower the cost of implementation. To support the District with the utility rebate and incentive process, the District has enrolled in the Southern California Regional Energy Network (SOCALREN), which offers services such as energy audits and incentive application support at no cost. The District should evaluate the applicability of these rebate and support programs as part of the scoping and evaluation process for each project.



Utility rebates and incentive programs may change as funding becomes available or is fully expended. For a current list of available rebates, visit:

<https://www.sce.com/wps/portal/home/business/savings-incentives/>

<https://www.sceonlineapp.com/DocCounter.aspx?did=535>

<https://www.socalgas.com/for-your-business/energy-savings/rebates-and-incentives>

<https://www.socalgas.com/for-your-business/energy-savings/zero-percent-financing>

Additional funding opportunities are available for capital projects. The District may apply for the following energy efficiency loan programs to support capital improvements:

- Southern California Edison On-Bill Financing Program
- Southern California Gas Zero Percent Financing Program
- U.S. Department of Energy's Property-Assessed Clean Energy (PACE) Program
- California Department of General Service's Energy \$mart Program
- California Energy Commission's Interest Rate 0% Loans Financing for Energy Efficiency + Energy Generation Projects (PON-13-403)



**WATER**

# WATER



Water is one of the most essential resources needed to support life and is critical for hydration, food production, sanitation, disease prevention, and energy generation. Due to Southern California’s dry climate and recurring drought conditions, the District is committed to water conservation and best management practices that support the responsible use of water resources. Given the coastal location of the Santa Monica and Malibu communities, managing stormwater run-off to protect the local marine environments and prevent pollution are also critical components of the District’s water program. The water plan addresses all direct sources of water use across the District, as well as contributing factors such as landscaping choices, with a goal to minimize reliance on potable water through the implementation of water conservation and efficiency programs. Education on the importance of water resources, regional challenges, and behavior change opportunities is also a cornerstone of the water program and will assist the District with achieving the water program goals.

## PERFORMANCE INDICATORS

### METRICS



**Water Used**  
*Total gallons of water consumed annually.*

## PROGRAM MISSION

Preserve water resources for future generations and support regional water goals by implementing water conservation and efficiency measures, eliminating sources of water waste, and promoting the capture and infiltration of stormwater.

## GOALS

### ONGOING

- Comply with all applicable stormwater regulations.
- Integrate low-impact development strategies beyond code requirements into all construction projects.

### 2020

- Achieve the required 20% reduction in water consumption compared to 2013 levels.

### 2025

- Reduce water consumption by 20% compared to the 2017-18 baseline.

### 2030

- Reduce water consumption by 30% compared to the 2017-18 baseline.



## 1

### WATER CONSERVATION COMMITMENT

In 2017, the District entered into an agreement with the City of Santa Monica to reduce its water consumption by 2 million gallons per year in support of the City's 20% water reduction goal. Using the City's baseline year of 2013, 2 million gallons represents a 6% reduction in the District's annual water consumption. While this commitment sets a good interim goal, the District will need to reduce its water consumption by over 7 million gallons per year in order to achieve the 20% reduction target. The District is committed to implementing water conservation and efficiency measures to minimize water consumption and meet regional water targets, with a goal to achieve the 20% reduction by the year 2020.

## 2

### WATER CONSERVATION GRANT FUNDS

To support the District's water conservation commitment, a Memorandum of Understanding (MOU) was established in 2017 with the City of Santa Monica, which awarded a grant of up to \$849,000 to assist the District with undertaking water audits and completing water conservation projects within the Santa Monica schools. As required by the MOU, the District is actively working with the City to prioritize how these grant funds will be spent based on the potential water savings and implementation costs of recommended conservation measure. This approach will ensure that both the District and the City realize maximum water savings through the use of these grant funds.

# CURRENT INITIATIVES



## 3★ WATER AUDITS AND MONITORING

**Water Audits:** As a first step in the District's water program, full indoor and outdoor water audits were conducted at all District sites in order to identify opportunities for water conservation, efficiency, and improved water management. The indoor audits examined fixtures such as sinks, toilets, showers, pools, drinking fountains, dishwashers, icemakers, and washing machines to identify potential efficiency measures. The outdoor audits inspected irrigation systems, landscaping selection, hoses, and appliances such as outdoor sinks and water fountains. The audits also identified leaks, broken faucets, and underground flooding that were sources of water waste. Combined, the audits identified over 20,000,000 gallons worth of potential water savings and have the potential to reduce the District's annual water consumption by up to 40% compared to the 2017-18 baseline. Priority projects for implementation in FY 2019-2020 include faucet aerators; high-efficiency shower heads, toilets, and urinals; and irrigation system repairs and controllers.

**Water Monitoring Software:** To enable ongoing monitoring of the District's water use, the District partnered with the City of Santa Monica to deploy smart water meters and the WaterSmart water consumption tracking software in fall 2018. The WaterSmart tool wirelessly connects with the District's water meters to provide real-time leak detection alerts, consumption analytics, and mobile compatibility for remote access. This tool will allow the District to more effectively track water consumption, cost, and performance in support of its water conservation goals.



# CURRENT INITIATIVES

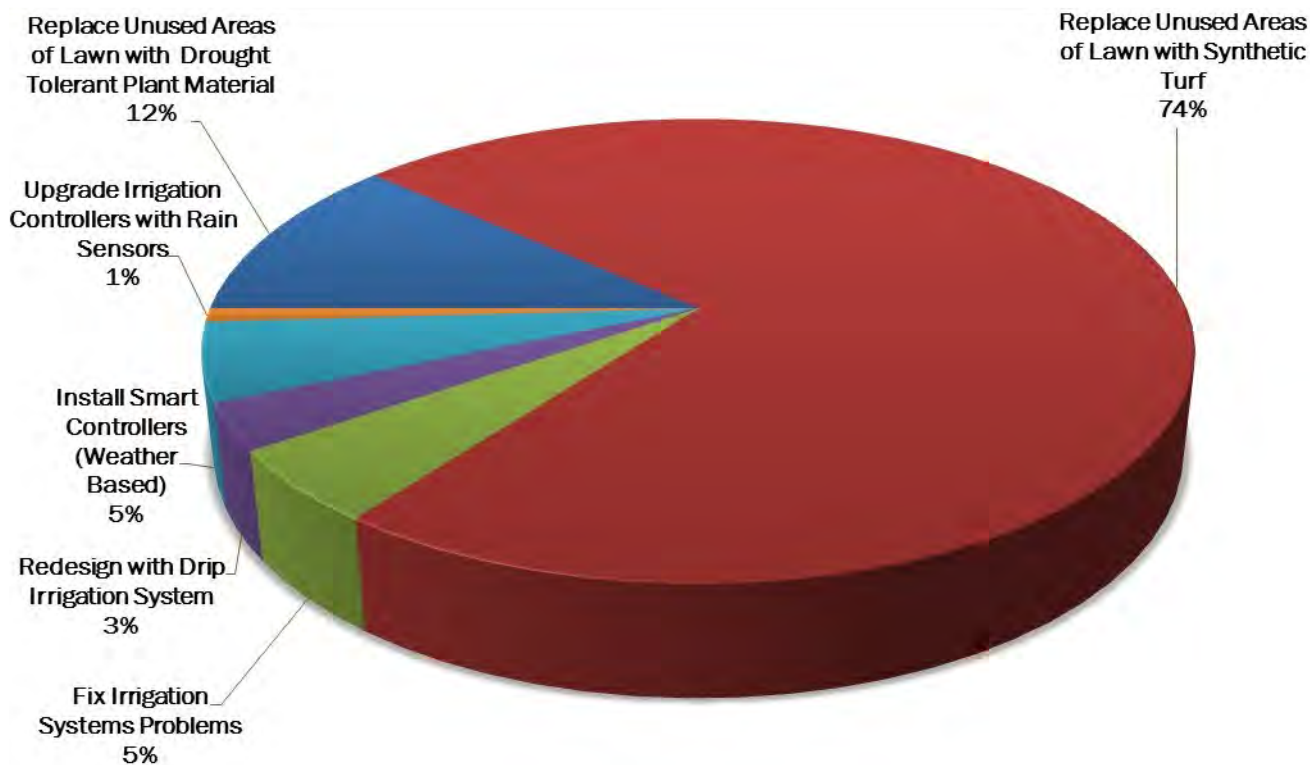


## 4

### WATER CONSERVATION INITIATIVES

★ **Cash for Kitchens:** The District is participating in the Cash for Kitchens program offered by the West Basin Municipal Water District for the City of Malibu, which provides support and funding for water conservation and efficiency projects within restaurants and other food service facilities. Audits of the kitchens at all four Malibu school campuses were conducted in 2017 to identify water efficiency measures. Based on the audit findings, the District will receive free installation of faucet aerators, flow restrictors, and pre-rinse spray valves for these facilities. When complete in 2019, these retrofits will reduce water consumption by an estimated 623,055 gallons per year, which represents a 1% reduction compared to the 2017-18 baseline. Participation in sponsored water conservation programs such as Cash for Kitchens is a best practice and will minimize the financial investment and staff labor required for the District to achieve their water conservation goals. The District should conduct similar kitchen audits of the Santa Monica school campuses to identify additional savings opportunities.

**Turf Replacement:** In 2018, the District converted Lincoln Middle School's athletic field from grass to synthetic turf with cork infill. This project will dramatically reduce the amount of water needed for field irrigation and will result in an estimated annual water savings of 3,229,488 gallons per year. The cork infill used for this project is an environmentally friendly alternative to rubber that is non-toxic to marine life, low-odor, and a renewable resource. Cork does not absorb heat the way other infill materials do, which further reduces the need for water to cool the field. This project alone represents a 7% reduction from the District's 2017-18 water consumption baseline.





## 5

### IRRIGATION AND LANDSCAPING

Given Southern California's temperate climate, landscaping choices and irrigation systems can be significant drivers of water consumption and are therefore important components of a water conservation program. The District's outdoor water audits included an evaluation of irrigation systems, controllers, and landscaping selections to identify opportunities for conservation and efficiency gains.

**Irrigation Systems:** A review of the District's irrigation infrastructure revealed a large number of chronic leaks, which result in significant water loss. Fixing these leaks and upgrading the irrigation systems overall are high priority tasks for the water program and will yield water savings. However, the magnitude of these repairs exceeds the District's limited staffing resources. The District should explore using the Santa Monica grant funds to contract out the irrigation systems repairs. The irrigation audits also identified savings potential in upgrading the existing irrigation controls to "smart" irrigation systems that detect leaks and allow for remote management of irrigation schedules. A smart irrigation system will not only assist the District with addressing water waste, but it will also allow the Grounds Maintenance staff to save time by managing irrigation systems remotely.

**Landscaping:** The District's existing landscaping and vegetation types were documented during the audits and assessed in relation to the irrigation systems and schedules. It was determined that the District is over-watering much of the landscaping and that aligning the irrigation schedules with the landscaping water needs could save water. Furthermore, the District has an opportunity to reconsider the types of plants selected for new landscaping and transition to drought-tolerant and native plants that support local biodiversity and minimize water use. The District is evaluating high-priority landscaping areas for conversion.



# CURRENT INITIATIVES

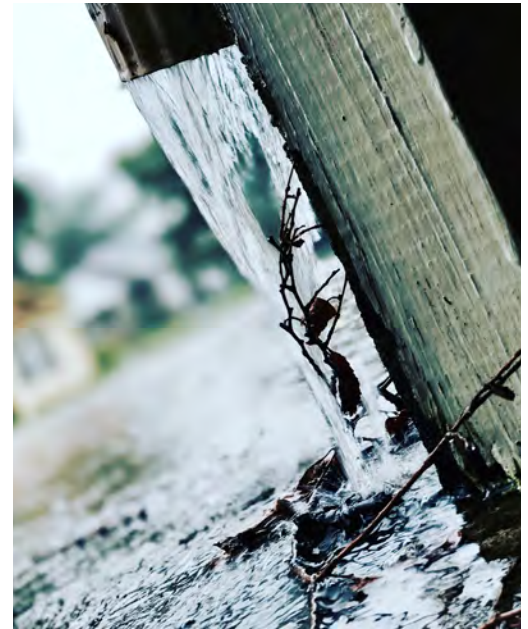


## 6

### STORMWATER MANAGEMENT:

To ensure proper stormwater management, the District has a dedicated Stormwater Compliance Manager on staff who is responsible for collecting stormwater samples and sending them out to be tested. The District will continue to evaluate and implement stormwater best management practices to minimize runoff and protect the local marine environment.

- ★ **Water Capture:** As part of the Edison Language Academy modernization project, two underground cisterns were installed to capture and store irrigation and stormwater run-off. Urban run-off is one of leading causes of water pollution. By collecting this run-off at the source, the District is helping to minimize the amount of pollutants washed out to the ocean. Water collected in the cisterns is used to supplement the irrigation system and minimize potable water use. This is a best practice for stormwater management and water conservation and should be considered as part of all modernization project designs.



## 7

### WATER CONSERVATION EDUCATION PROGRAM

- ★ The District's co-curricular Water Conservation Education Program is one of the key ways that the District educates students on important water-related topics, such as the lifecycle of water and the importance of conservation. The curriculum content highlights the specific landscape, climate, and marine regions of Santa Monica and Malibu, making the material applicable to the District's students. However, the program is currently limited to 5th Grade students and remains optional. As part of the District's water and sustainability education programs, this program should be expanded to include 3rd and 4th grade students and schools should incentivize teachers to participate.





# RECOMMENDED STRATEGIES

The recommended strategies for the water program address the findings and recommendations from the District's indoor and outdoor water audits and prioritize best management practices for water monitoring and management. They also include recommendations for education and training programs that will build the internal capacity necessary for the District to maintain system efficiency over time. As such, these strategies provide a strategic roadmap to help the District achieve its water conservation goals and support regional water priorities.

\*While the District Sustainability Department will be responsible for leading the implementation of the Sustainability Plan and all recommended strategies, the identified departmental "Key Stakeholders" will be responsible for working closely with the District sustainability team to strategize, plan, and implement the recommended sustainability strategies. The District considers sustainability to be the responsibility of all staff members, so collaboration and buy-in from these key stakeholders will be critical to the success of the plan.

RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Policies</b>			
Establish purchasing standards for all new water consuming fixtures and equipment. Recommended standards include: <ul style="list-style-type: none"> <li>Requirements for EPA WaterSense label.</li> <li>SoCal Water Smart qualified devices.</li> <li>District standard make/model for irrigation controllers.</li> </ul>	Funding Needed: Staff Time	1	Purchasing, M+O
Establish policy requirements that all construction and major renewal projects explore the viability of integrating low-impact development strategies beyond code requirements.	Funding Needed: Bond Program	2	Facility Improvement Projects
Update the District's Energy and Water Conservation Board Policy (BP 3511) to include the District's water conservation and stormwater management commitments and goals.	Funding Needed: Staff Time	3	Board of Education
<b>Water Efficiency and Management</b>			
Upgrade faucet aerators and showerheads with high-efficiency alternatives.*	Funding Needed: General Fund & Grant Funds	1	M+O
Work with the Cash for Kitchens program to coordinate installation of the water saving devices in the Malibu food service facilities by the start of 2019 academic year.*	No Additional Funding Needed	1	M+O
Develop a plan and schedule to conduct kitchen water audits at the Santa Monica schools using Metropolitan Water District rebate funds.*	Currently Funded: Staff Time	1	M+O
Replace domestic plumbing fixtures with high efficiency fixtures: * <ul style="list-style-type: none"> <li>0.125 GPF models for urinals</li> <li>0.8 GPF models for tank toilets</li> <li>1.1 or 1.26 GPF models for flush valve toilets</li> </ul>	Funding Needed: General Fund & Grant Funds	2	M+O
Train M+O staff on using the WaterSmart system to monitor water consumption trends and receive leak detection alerts.	Funding Needed: Staff Time	2	M+O, IT
Install a sub-meter on all Santa Monica and Malibu pools to identify leaks and quantify water loss. Evaluate the cost and water saving potential of repairing any leaks discovered.	Funding Needed: Bond Program	2	M+O
Evaluate the Malibu schools water audits to identify additional water conservation opportunities. Prioritize measures based on water savings per dollar cost, including available rebates through the City of Malibu water partners.	Currently Funded: Staff Time	3	M+O

\*Implementation strategy includes use of grant funds for materials, equipment, or labor.

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Water Efficiency and Management</b>			
Create a water waste reporting email account to streamline community reports of leaks, sprinkler breaks, and other water waste issues.	Funding Needed: Staff Time	3	M+O
Develop a “Prevent Water Waste” awareness campaign asking the District community to report leaks, sprinkler breaks, and other water waste issues.	Funding Needed: Staff Time	4	M+O, Communications
Apply for applicable rebates and incentives for planned water efficiency measures.	Funding Needed: Staff Time	4	M+O
Explore opportunities at existing facilities to capture and infiltrate rainwater and irrigation/stormwater runoff, such as integrating bioswales into landscaping redesign projects.	Funding Needed: Bond Program	4	M+O
<b>Irrigation and Landscaping</b>			
Explore the use of Santa Monica grant funds to complete irrigation system repairs and fix line leaks.*	Funding Needed: General Fund & Grant Funds	1	M+O
Conduct a market assessment of weather-based smart controllers and central control irrigation system alternatives for the existing irrigation timers. Include leak detection as a required feature.	Funding Needed: Staff Time	1	M+O
Procure and install new smart irrigation controllers.	Funding Needed: General Fund	1	Purchasing
Explore the use of Santa Monica grant funds to upgrade the irrigation system infrastructure, including:* <ul style="list-style-type: none"> <li>Replace sprinklers and rotors irrigating turf areas with high efficiency alternatives.</li> <li>Replace sprinklers irrigation shrub areas with drip irrigation.</li> </ul>	Funding Needed: General Fund & Grant Funds	2	M+O
Conduct a survey of District sites to identify ornamental turf and prioritize site for conversion to drought tolerant landscaping.	Funding Needed: General Fund	2	M+O
Adopt the California Friendly Landscaping maintenance techniques and provide all Grounds Maintenance staff members with access to the Professional Landscaper, California Friendly Landscape Training Program.	Funding Needed: General Fund	3	M+O
Implement California Friendly Landscaping best management practices for water conservation such as applying mulch to planter beds and adjusting mower height so no more than 1/3 of grass is removed during mowing.	Funding Needed: Staff Time	3	M+O
Program the new irrigation controllers based on the recommended irrigation schedules identified in the District’s irrigation audits.	Funding Needed: Staff Time	4	M+O
Develop landscaping and irrigation SOPs detailing best management practices and District standards for plant selection, irrigation scheduling, controllers, and maintenance practices.	Funding Needed: Staff Time	4	M+O
Explore opportunities to capture rainwater and grey water to supplement irrigation.	Funding Needed: Bond Program	4	M+O

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Education and Engagement</b>			
Distribute the monthly water consumption reports from WaterSmart to communicate performance to each school. Distribute to Principals and other key points of contact.	Currently Funded: Staff Time	1	Communications
Expand the Water Conservation Education Program to include 3rd and 4th grades and encourage teacher participation.	Funding Needed: General Fund	1	Educational Services
Explore the feasibility of expanding the annual Energy Competition to include water.	Funding Needed: Staff Time	2	Principals
Integrate water systems education and infrastructure such as rain barrels and bioswales into the Garden Education program curriculum.	Funding Needed: General Fund	2	Educational Services
Include operations and maintenance training in the RFP scope of work when procuring all new irrigation equipment and control systems.	No Additional Funding Needed	3	Purchasing, Facility Improvement Projects
Explore opportunities to integrate the WaterSmart dashboard into the District's education and experience-based learning programs.	Funding Needed: Staff Time	3	Teachers, Principals
Create "Water Wisdom" decals containing water conservation tips for posting on bathroom mirrors.	Funding Needed: General Fund	4	Communications
Provide water conservation tips and information on the water program on the District's website.	Currently Funded: Staff Time	4	Communications

# PROJECT COSTS AND FUNDING MECHANISMS



## IMPLEMENTATION COSTS

The infrastructure upgrades and system improvements recommended as part of the water program will require capital investment from the District; however, these costs will be substantially offset by the City of Santa Monica water conservation grant funds and local support programs such as the Malibu CASH for Kitchens and Santa Monica direct install programs. While there may also be additional labor costs associated with project management and new system controls, these efforts will ultimately improve staff efficiency and allow for certain tasks to be accomplished remotely. This will save time for staff such as the Grounds Maintenance crews who are responsible for all schools in the District and spend substantial time driving. Once the initial retrofits have been made, the District should leverage procurement processes and capital projects to ensure that considerations for high-efficiency equipment and stormwater management systems are integrated into modernization projects.

## FUNDING OPPORTUNITIES

Due to the regional urgency to conserve water, the District has access to numerous grants, rebates, incentives, and support programs that reduce the financial impact of implementing water conservation, efficiency, and management programs. Malibu and Santa Monica offer rebate programs in partnership with the Metropolitan Water District of Southern California and the West Basin Municipal Water District, which should be pursued to minimize the District's out of pocket costs. Additionally, the water efficiency grant received from the City of Santa Monica provides the District with a unique funding source that can be used for contract labor, repairs, and turf replacement, in addition to more traditional water conservation measures such as funding new fixtures and devices. In combination, these funding opportunities will allow the District to quickly and effectively reduce water consumption and resolve water waste issues.

## PROGRAM COST SAVINGS

The water program is anticipated to reduce the District's annual utility costs by reducing demand for purchased water. For example, water rates in Santa Monica increased by 5% in 2018 and additional increases are proposed across the region for future years. Water rates are projected to continue increasing in coming years as water remains scarce and distribution infrastructure requires innovation and renewal investment. These water conservation and efficiency efforts will insulate the District from future rate hikes and ensure that education funds are not diverted to cover the District's water needs. Cost savings resulting from the implementation of water projects should be tracked and used to fund additional sustainability programs in the future.

### CASE STUDY

In partnership with the Santa Monica and Malibu water conservation programs, the District has identified opportunities to upgrade existing domestic plumbing fixtures with high-efficiency faucet aerators, spray valves, showerheads, toilets, and urinals. Through these projects the District will reduce its annual water consumption by an estimated 10,000,000 gallons, or 13,360 hundred cubic feet (HCF). At an average cost of \$8.21 per HCF of water and the associated sewer service, the reduction in water use resulting from these projects will **save the District an estimated \$110,000 per year.**

### REBATE PROGRAMS:

<http://socalwatersmart.com/commercial/>

[https://www.malibucity.org/DocumentCenter/View/5986/LIEP-flyer\\_170828?bidId=](https://www.malibucity.org/DocumentCenter/View/5986/LIEP-flyer_170828?bidId=)

<https://www.smgov.net/Departments/OSE/categories/water.aspx>



# **SOLID WASTE**

# SOLID WASTE



The District recognizes that “the conservation of natural resources and protection of the environment are connected to the District’s educational mission and are essential to the health and well-being of the community” (Board Policy 3511.1 – Integrated Waste Management). Therefore, the District’s solid waste program strives to minimize waste production and landfill disposal resulting from daily operations and construction activities through the implementation of comprehensive waste minimization, reuse, recycling, organic waste, and education programs. These programs look upstream at purchasing decisions and internal practices in order to improve the efficiency of material resource use, as well as downstream at disposal strategies that minimize environmental impact and support a more circular economy. The Solid Waste program employs the waste hierarchy principle, which prioritizes waste management in the order of: Reduce, Reuse, Recycle, Compost, Transform, Landfill.

The disposal of commercial solid waste in landfills has been identified as a significant source of greenhouse gas emissions, therefore, diverting waste from landfill is also a critical component of the District’s climate protection strategy.

## PERFORMANCE INDICATORS

### METRICS



#### Total Waste Generation

*Tons of Municipal Solid Waste (MSW) generated.*



#### Diversion from Landfill

*Percent of Municipal Solid Waste diverted from landfill.*



#### E-Waste Recycling

*Percent of e-waste recycled.*



#### Construction + Demolition Recycling

*Percent of C+D waste recycled per project.*

## PROGRAM MISSION

Design an integrated waste management program that minimizes the generation of waste, encourages the recovery and diversion of reusable materials from the waste stream, improves efficiency in the utilization of natural and material resources, and protects the environment.

– Board Policy AR 3511.1(a), *Integrated Waste Management*

## GOALS

ONGOING	2020	2025	2030
<ul style="list-style-type: none"> <li>Comply with all local, regional, state, and federal solid waste regulations.</li> <li>Recycle 100% of e-waste.</li> <li>Exceed CalGreen C+D recycling requirements for all construction projects.</li> </ul>	<ul style="list-style-type: none"> <li>Reduce total waste generation by 5% compared to 2017-18 baseline.</li> <li>Increase diversion from landfill to 45%</li> <li>Eliminate single-use plastic water bottles Districtwide.</li> </ul>	<ul style="list-style-type: none"> <li>Reduce total waste generation by 10% compared to 2017-18 baseline.</li> <li>Increase diversion from landfill to 60%</li> </ul>	<ul style="list-style-type: none"> <li>Reduce total waste generation by 20% compared to 2017-18 baseline.</li> <li>Increase diversion from landfill to 85%</li> </ul>



## 1 INTEGRATED WASTE MANAGEMENT BOARD POLICY

The District first adopted the Integrated Waste Management Board Policy in 2009, which formally established solid waste management as a District priority and an important component of the sustainability program. The policy charges the District with implementing programs and practices to “reduce solid and hazardous waste generation, improve efficiency in its use of natural resources, and minimize the impact of such use on the environment.” The policy was updated in 2012 to include administrative regulations that target source reduction, procurement, and recycling as key strategies. This policy serves as the foundation of the District’s solid waste program.

## 2

### WASTE MANAGEMENT SERVICES

The District’s municipal solid waste services are supplied by Waste Management and include landfill trash, co-mingled recycling, and organic waste collection and disposal. The existing contract includes requirements for separate color-coded dumpsters for each waste stream (black for trash, blue for recycling, and green for organic waste), which is considered an industry best practice. Efforts to improve the collection system and obtain accurate data on waste diversion and disposal are underway in partnership with Waste Management. It is recommended that the District update future waste services contracts to specify waste diversion strategies and reporting requirements that provide more transparency on activities and reduce the District’s waste related GHG emissions.



## 3

### WASTE PREVENTION

While recycling remains an important practice, preventing waste through the use of reusable products and eliminating unnecessary resource consumption is considered the first line of defense for keeping waste out of landfills. The District has the following programs in place to prevent waste:

**Water Bottle Filling Stations and Reusable Water Bottles:** In an effort to discourage single-use plastic water bottles, the District is committed to making water bottle filling stations accessible at all schools. Filling stations have been installed at many of the District's schools and the District is committed to installing an additional 30 stations per year over the next 4 years. Additionally, Food Services is now offering branded reusable bottles for sale across the District as an alternative to single use water bottles. Additional education is needed to incentivize the use of reusable bottles and change the existing culture of single use water bottles. This program also supports the District's goal to provide all students with access to free, potable water as part of the District's Board Policy 3550 – *Food Service/Child Nutrition Program*.

★ **John Adams Middle School**, in partnership with Grades of Green, hosted a waste awareness event during lunch featuring a water refill station to encourage staff and students to use reusable water bottles in lieu of single use plastic bottles. Trivia games and a "waste race" challenge also taught students how to sort recyclable items from landfill waste.

**Plastic Straw and Container Ban:** The District has eliminated the use of plastic straws and is identifying alternatives for plastic food containers in an effort to reduce the District's reliance on plastics and to prevent the generation of a non-recyclable waste materials. The straw ban took effect in Fall 2018 and Food Services is planning to transition all necessary disposable containers to marine degradable containers starting in January 2019.

★ **Trash Free Lunch Program:** McKinley Elementary, Will Rogers Elementary, and Franklin Elementary are participating in the Grades of Green *Trash Free Lunch Program*. This program encourages students to reduce waste during lunch time by bringing lunch in reusable containers and learning how to recycle. This program represents a best practice for waste prevention and is an effective tool for engaging students and their families in waste reduction efforts. It is recommended that the District provide support for this program to be expanded to all schools.





## 4

### RECYCLING

The District's recycling system is single-stream, meaning that all recyclable materials (paper, plastic, glass, etc.) are co-mingled in a single recycling bin. Single-stream recycling has the potential to increase recycling participation, but the size, shape, and color of the recycling bins provided are inconsistent within schools and across the District. As a result, there is confusion amongst students and other District staff about how to properly recycle. New signage, recycling education, and streamlined recycling bins will increase recycling participation and help the District meet their waste diversion goals. Furthermore, while all District custodial and M+O staff have undergone training on recycling and proper waste sorting, additional engagement with union leaders and department supervisors is needed to ensure that these tasks are officially recognized as part of the maintenance and custodial job duties. A recycling improvement plan is currently being developed, which will address these issues and improve the recycling system.

**Facility Use Events:** The District takes responsibility for all waste generated on its property, including waste resulting from both District-organized and external events. Recycling is being integrated into the standard event set-up for all Facility Use events. Educational signage and clearly labeled recycling bins are now being provided in addition to standard waste containers. Training with the custodial staff is also being conducted to ensure event recycling is properly handled and disposed of after the event.

# CURRENT INITIATIVES



## 5

### ORGANIC WASTE

★ **Landscaping Green Waste:** The District's Grounds Maintenance team diverts landscaping green waste from landfill through reuse on-site and contracted organics processing services. All grass clippings are mulched and used on-site to return nutrients to the soil. Tree trimmings are chipped and used on hill-sides. Green waste not suitable for use on site, such as hedge trimmings, are placed in the green waste bins to be used as waste-to-energy feedstock.

**Food Waste Composting:** Food waste generated in the cafeterias at Cabrillo Elementary, Grant Elementary, Lincoln Middle School, McKinley Elementary, Point Dume, Roosevelt Elementary, Webster Elementary, and Will Rogers Elementary is being separated and collected for composting. Several of these schools are also closing the loop by using their food waste on-site as a soil amendment in the teaching gardens. The District's composting program is still in its pilot phase, but the District plans to expand and institutionalize food waste composting to all schools in the future, in compliance with California's Mandatory Commercial Organics Recycling ordinance (AB 1826).

## 6

### E-WASTE + HAZARDOUS WASTE

★ **E-Waste:** The District has developed an e-waste policy to ensure that all District e-waste is properly recycled. The District's end-of-life electronics are collected by the non-profit human-I-T, which specializes in data destruction, electronics refurbishing, and recycling. Refurbished items are donated to communities in need and end-of-life items are properly recycled. The District tracks the disposal of all e-waste items and will report on e-waste recycling as part of the annual sustainability report.

**Hazardous Waste:** The District has programs in place to collect and properly dispose of hazardous materials such as fluorescent light bulbs and paint. The District is committed to continually evaluating best management practices for the handling and disposal of hazardous waste and adopting strategies to minimize environmental impact.



## 7

### CONSTRUCTION AND DEMOLITION

The District is committed to managing construction and demolition (C&D) waste using waste prevention/diversion principles and strives to exceed the CalGreen waste diversion requirements. The District's Utility Technician tracks and monitors all waste resulting from C&D activities in order to ensure CalGreen compliance. The District will continue to explore and implement best management practices for C&D waste resulting from modernization and new construction projects.



# RECOMMENDED STRATEGIES

The recommended strategies identified for the solid waste program include improvements to the District's solid waste infrastructure, policy development, support services, internal program creation/expansion, and the development of education and training programs. These strategies address deficiencies identified through recent program assessment efforts, as well as opportunities to expand and institutionalize existing best practices Districtwide.

\*While the District Sustainability Department will be responsible for leading the implementation of the Sustainability Plan and all recommended strategies, the identified departmental "Key Stakeholders" will be responsible for working closely with the District sustainability team to strategize, plan, and implement the recommended sustainability strategies. The District considers sustainability to be the responsibility of all staff members, so collaboration and buy-in from these key stakeholders will be critical to the success of the plan.

RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Policies and Support Services</b>			
Implement a Districtwide plastic-free food service policy in alignment with the City of Santa Monica.	No Additional Funding Needed	1	Food Services
Adopt a polystyrene material ban in alignment with the City of Santa Monica and Malibu.	No Additional Funding Needed	1	Purchasing
Install dishwashers in all food service facilities to support the use of reusable dishware and waste reduction.	Funding Needed: General Fund	1	Food Services, M&O, Facility Improvement Projects
Establish policy requirements for waste management plans to be prepared as part of the project development process for all construction projects.	Funding Needed: Staff Time	2	Facility Improvement Projects
Update the District's Integrated Waste Management policy [AR 3511.1(a)] to include all waste related policies, an integrated waste management hierarchy, District roles and responsibilities, performance goals, and industry best management practices.	Funding Needed: Staff Time	2	Board of Education
Revise the District's waste service provider contract and RFP to include requirements for monthly waste disposal and diversion reporting, material end use/disposal method specifications, periodic waste auditing, staff training, signage, and communications materials.	Funding Needed: Staff Time	3	Purchasing, M+O
Conduct a bin subscription evaluation to assess the most cost-effective combination of bin sizes, quantities, and pick-up frequencies to meet the District's solid waste capacity needs.	Currently Funded: Staff Time	3	M+O
Develop an Environmentally Preferable Purchasing policy that considers material waste and establishes standards for reusable products, reduced packaging, cradle-to-cradle product design, supplier take-back programs, and recycled content materials.	Funding Needed: Staff Time	4	Purchasing
<b>Waste Prevention</b>			
Accelerate the installation of water bottle filling stations to add an additional 40 stations in 2 years and conduct an assessment of the additional stations needed to provide access to all students.	Funding Needed: General Fund	1	M+O
Set double-sided printing as the default standard for all District computers.	Funding Needed: Staff Time	1	IT
Develop an implementation plan for transitioning Food Service disposable trays and utensils to reusables.	Funding Needed: Staff Time	1	Food Services
Replace single use water bottles at District events with bulk water dispensers and marine degradable cups.	Funding Needed: General Fund	2	Facility Use Department

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Waste Prevention</b>			
Develop a Sustainable Event Certification and Zero Waste events policy in partnership with the Facility Use Department.	Currently Funded: Staff Time	2	Facility Use Department
Develop a surplus property program to internally reuse, sell, or donate surplus furniture, office/school supplies, and other equipment no longer needed by the District.	Funding Needed: Staff Time	2	Purchasing
Conduct annual waste characterization studies to identify target materials for waste prevention and diversion programs.	Funding Needed: Staff Time	3	M+O
Explore the feasibility of replacing paper towel dispensers with hand dryers.	Funding Needed: General Fund	3	M+O
Explore opportunities to transition administrative functions to paperless processes.	Funding Needed: Staff Time	4	IT
<b>Waste Diversion</b>			
Develop and deploy bin labels and signage for all waste streams: trash, recycling, and organic waste.	Funding Needed: General Fund	1	M+O, Communications
Engage with the District Personnel Commission, union leaders, and District supervisors to integrate recycling activities into the M+O job duties and performance expectations.	Funding Needed: General Fund	1	M+O, Human Resources
Replace interior and exterior waste collection bins with a 3-bin system providing trash, recycling, and organics collection wherever trash cans are located. Ensure bins are consistent Districtwide.	Funding Needed: General Fund	1	M+O
Transition all plastic food service items to marine degradable products, including serving items used at Facility Use events. Partner with the City of Santa Monica and Malibu technical experts for implementation assistance.	Funding Needed: General Fund	2	Food Services, Facility Use Events
Replace current custodial carts with dual-stream carts.	Funding Needed: General Fund	2	M+O
Purchase recycling bins to be included as a standard component of all Facility Use events.	Funding Needed: General Fund	2	Facility Use Events
Establish specialty diversion programs for recyclable operational waste such as scrap metal and cardboard.	Funding Needed: Staff Time	3	M+O
Implement a food waste collection and composting program at each school site for both pre-consumer and post-consumer food. Utilize food waste on-site for garden compost as feasible and send the remainder for industrial composting.	Funding Needed: Staff Time	3	Food Services
Divert used paper towels to the organics waste stream to be composted or used for waste-to-energy.	Funding Needed: General Fund	4	M+O
Evaluate best management practices for diverting C&D waste as part of each project development process.	Funding Needed: Staff Time	4	Facility Improvement Projects

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Education and Engagement</b>			
Conduct solid waste training with Custodial, M+O, Food Service, and other relevant operations staff a minimum of once per year.	Funding Needed: Staff Time	1	M+O, Food Services
Implement a “Bring Your Own Bottle (BYOB)” marketing campaign at all schools to encourage the use of reusable water bottles.	Funding Needed: General Fund	1	Communications
Create a Recycling Champions program offering teachers and staff a \$500 stipend for serving as a site recycling coordinator.	Funding Needed: General Fund	1	Teachers, Principals
Partner with the Cities of Santa Monica and Malibu to develop and conduct recycling and waste educational assemblies at each school.	Funding Needed: Staff Time	2	Educational Services
Incorporate recycling tips into the Principal Weekly Memos.	No Additional Funding Needed	2	Communication, Principals
Integrate waste system education and policy goals into new staff orientation.	Funding Needed: Staff Time	3	HR
Develop a Districtwide Trash Free Lunch Program and implement at all schools. Incorporate promotional messages on the program in the “Monday Message” to all parents.	Funding Needed: Staff Time	3	Food Services, Communications
Develop and implement a single-use water bottle reduction competition across the District.	Currently Funded: Staff Time	4	Food Services, Principals
Participate in the annual Keep California Beautiful California Recycling Challenge competition for K-12 schools.	Funding Needed: Staff Time	4	M+O

# PROJECT COSTS AND FUNDING MECHANISMS



## IMPLEMENTATION COSTS

Implementation of the solid waste program will require one-time project funds to cover material costs such as new bins and signage, as well as on-going operational funds to cover vendor services and District labor costs. The District should redirect a portion of the Facility Use Department \$20 sustainability event fee to offset the cost of implementing sustainability programs such as zero waste event infrastructure. While the capital and material costs associated with the solid waste program are relatively low, implementation and ongoing management of the program will require additional staff time. The District should explore a distributed management structure to minimize the burden on any one staff member or department and spread responsibility across all operational areas.

## FUNDING OPPORTUNITIES

Grant funding opportunities may be available to the District to offset program implementation costs. The District is eligible to apply for the CalRecycle Beverage Container Recycling Grant, which funds the purchase of beverage container recycling bins, the implementation of pilot programs, and recycling education. Recycling grants may also be available through partnerships with the Cities of Santa Monica and Malibu. The District should monitor available grant opportunities on an annual basis to identify new opportunities.

## PROGRAM COST SAVINGS

The solid waste strategies identified for implementation have the potential to yield cost savings for the District through material efficiency and a reduction in waste hauling and disposal costs. The District pays a lower rate for the collection and processing of recyclables than it does for landfill. By increasing the collection of recyclables and adjusting trash service levels accordingly, the District will reduce annual waste hauling costs. These cost savings should be quantified, tracked, and used to offset other implementation costs and program maintenance overtime.

## CASE STUDY

By reducing the District's trash collection frequency from 3x to 2x per week and increasing recycling collection from 2x to 3x per week, **the District could save over \$20,000 per year in hauling costs.**

## AVAILABLE GRANTS:

[CalRecycle Beverage Container Recycling Grant](#)



# TRANSPORTATION

# TRANSPORTATION



Transportation accounts for nearly 40% of the greenhouse gas emissions in California and is responsible for air pollutants that impact community health and the environment. This is a major issue facing the Santa Monica and Malibu communities and has been identified as a high priority topic within the Santa Monica Climate Action and Adaptation Plan. The District's transportation program seeks to minimize the impact of the District's owned and operated fleet vehicles, such as school buses, as well as District staff and student commuting practices. While the District only has direct control over District owned and operated fleet vehicles, encouraging staff and students to use alternative commuting strategies will support local efforts and will aid the District with addressing parking limitations. Transitioning to high-efficiency and alternative fuel vehicles and advocating for the use of sustainable transportation/commuting methods will also reduce emissions, improve air quality, mitigate local vehicle congestion, and reduce operational costs for the District.

## PROGRAM MISSION

Convert to environmentally friendly vehicles and fuels, reduce single occupancy vehicle trips, and encourage sustainable transportation methods such as carpooling, walking, and biking that enhance mobility and decrease congestion.

## PERFORMANCE INDICATORS

### METRICS



#### Fleet GHG Vehicles

*Greenhouse gas emissions resulting from the operation of the District's fleet vehicles.*



#### Drive Alone Rate

*Percent of District employee commuters arriving in a single occupancy vehicle.*



#### Staff Average Vehicle Ridership (AVR)

*The ratio of District employees to vehicles arriving at the work site.*

**3:1**

#### Student Average Vehicle Ridership (AVR)

*The ratio of District students to vehicles arriving at school.*

## GOALS

ONGOING	2020	2025	2030
<ul style="list-style-type: none"> <li>Offer Districtwide transportation demand management programs.</li> </ul>	<ul style="list-style-type: none"> <li>Conduct a GHG inventory of the District's fleet vehicle emissions and establish emission reduction targets.</li> <li>Reduce the drive alone commute rate by 5% compared to 2017-18 baseline.</li> <li>Achieve a Districtwide average AVR for staff of 1.35 or better.</li> <li>Establish a baseline for student commuting practices and develop AVR goals.</li> </ul>	<ul style="list-style-type: none"> <li>Achieve the Year-5 GHG emission reduction targets for the District's fleet vehicles.</li> <li>Reduce the drive alone commute rate by 10% compared to 2017-18 baseline.</li> <li>Achieve a Districtwide average AVR for staff of 1.55 or better.</li> <li>Achieve the Year-5 student commuting AVR goals.</li> <li>Provide a minimum of two EV chargers at each District site.</li> </ul>	<ul style="list-style-type: none"> <li>Achieve the Year-10 GHG emission reduction targets for the District's fleet vehicles.</li> <li>Reduce the drive alone commute rate by 15% compared to 2017-18 baseline.</li> <li>Achieve a Districtwide average AVR for staff of 1.75 or better.</li> <li>Achieve the Year-10 student commuting AVR goals.</li> <li>Provide a minimum of five EV chargers at each District site.</li> </ul>

# CURRENT INITIATIVES



## 1

### TRANSPORTATION PLANNING

**District Commuter Survey:** The District conducted a commuter survey in September-October of 2017 designed to capture information on how and when District staff arrive at work. This survey was the first step in developing a plan for transitioning the District to more sustainable transportation methods and will function as the District's baseline for commuting habits. In future years, the District will focus on increasing Districtwide participating in the survey to at least 90% to ensure accuracy and will expand the survey to include student commuting. As the District strives to increase Average Vehicle Ridership (AVR) in line with the City of Santa Monica's goals, this survey will provide critical data on an annual basis to inform the District's commuter programs and transportation strategies. The District should strengthen their existing relationship with the Santa Monica and Malibu transportation planning departments to collaborate on these efforts.



**Transportation Demand Management Plan:** In 2017, the District developed a Transportation Demand Management Plan, which identifies and prioritizes strategies to reduce single occupancy vehicle trips to the District's properties and promotes the use of alternative modes of transportation, such as walking, biking, and transit. The implementation of this plan will not only help the District advance the use of sustainable transportation methods and reduce congestion, but it will also reduce demand for parking and the costs associated with leased parking space. The District should formally adopt the Transportation Demand Management Plan and develop an strategy as part of their sustainable transportation program. While the Transportation Demand Management plan was primarily developed to address parking and congestion issues at Santa Monica High School, the recommendations should be adapted for implementation Districtwide in support of community transportation and climate goals.



## 2

### PARKING

As part of the Transportation Demand Management Plan, it is recommended that the District explore alternative strategies for staff commuting and parking. Parking is currently provided by the District for all staff, but due to limited parking availability, many of the District's parking spots are leased from nearby properties. This system incentivizes the use of cars as a means of commuting to/from work, which does not align with the District's transportation goals, but it is also extremely costly for the District. With rates for leased parking continuing to increase, the practice of supplying parking to all staff as a standard benefit is diverting financial resources away from education. In alignment with the City of Malibu and City of Santa Monica transportation demand management codes, the District should restructure their approach to staff transportation and parking to incentivize alternative commute methods, reduce annual overhead costs, and ensure that education funds are not redirected to cover parking costs.



*Indicates existing programs or initiatives that are considered a best practice.*

# CURRENT INITIATIVES



## 3

### ALTERNATIVE VEHICLES AND FUELING INFRASTRUCTURE

**Fleet Vehicle Upgrades:** The District has made substantial strides to convert conventional buses and fleet vehicles to more environmentally friendly vehicles and fuels. Of the 25 school buses in the fleet, 8 are now CNG powered, 16 are gasoline powered, and only 1 remains diesel powered. Additionally, the fleet of sedan vehicles used by District staff have been replaced with hybrid vehicles. The District will continue considering new, alternative vehicles as they replace the fleet and will explore the feasibility of using alternative fuel types that are compatible with the existing fleet vehicles, such as renewable natural gas, to reduce greenhouse gas emissions. As an emerging industry, alternative vehicles are not yet available in all vehicle categories, but the District will monitor emerging vehicle technology and consider new alternatives as part of each vehicle replacement process.

**Electric Vehicle (EV) Charging Stations:** The District is working with EV Connect through the Electrify America program to evaluate potential EV charger installation locations at John Adams Middle School, Lincoln Middle School, Malibu High School, and Santa Monica High School. The District aims to offer EV charging infrastructure at all District locations, which will encourage the use of electric vehicles and support the District's climate protection goals.

## 4

### ALTERNATIVE TRANSPORTATION PROGRAMS

**Bus Passes:** In 2018, the Facility Improvement Projects Department provided all employees at Santa Monica High School with unlimited passes for the Big Blue Bus through the Blue to Business program to compensate for reduced parking on-site resulting from campus construction. While this program was initiated as a construction mitigation effort, providing bus passes to staff is a key strategy identified in the District's Transportation Demand Management plan and is being considered for Districtwide roll-out. Providing bus passes to students should also be considered as a means of encouraging alternative transportation.



**Bike Parking:** Bike parking infrastructure is a critical component of supporting and encouraging the use of bikes as daily transportation. While all school sites have existing bike racks, additional capacity is needed to meet the existing demand and allow for increased participation. Additional bike parking infrastructure will be installed as part of the District's Transportation Demand Management plan implementation.



**Car Free Fridays:** The McKinley Elementary Sustainability + Beautification Committee coordinates an on-going program called Car Free Fridays to encourage students, families, and staff to commute to school using an alternative form of transportation on Fridays. This program serves to continuously educate the community about the available alternative transportation options and the importance of reducing the number of cars on the road. While car-free commuting may not be practical for all families or school sites in the District due to traffic concerns and distance, this program should none-the-less be expanded to include all schools. The District should provide the community with information on alternative transportation options and safe routes for biking and walking.

# CURRENT INITIATIVES



## 5

### SAFE ROUTES TO SCHOOL

The District participates in the Santa Monica Safe Routes to School program, which aims to eliminate barriers to biking and walking to school and encourage more active, healthy transportation methods. The program was initiated in 2012 and originally provided grants to develop walking and biking curriculum, bike safety training, outreach and events, and infrastructure recommendations at four schools: Roosevelt Elementary, Will Rogers Learning Community, John Adams Middle School, and Lincoln Middle School. The program was expanded in 2015 to include all Santa Monica schools and plays a critical role in promoting the use, safety, and accessibility of alternative transportation options. It is recommended that the District continue and expand community partnerships focused on building safe routes and infrastructure for student commuting.



- ★ **Bike It! Walk It!:** The bi-annual Bike It! Walk It! event is held in coordination with National Walk to School Day and the Safe Routes to School program to encourage parents, students, and staff to try biking or walking to school as their primary mode of transportation. The District coordinates “pit stop” booths during this event offering free snacks and coffee to encourage participation and build a community culture around alternative transportation. This District will continue to coordinate and promote this program across all school sites.





## RECOMMENDED STRATEGIES

The transportation strategies recommended for implementation include alternative fuels, vehicles, and fueling infrastructure to support the District's transition to a low carbon fleet, as well as programs that encourage District commuter use of alternative transportation methods that reduce single occupancy vehicles. The key recommendations resulting from the development of the Santa Monica High School Transportation Demand Management plan have been included in the list of recommended strategies and should be expanded Districtwide after initial implementation has been tested at Santa Monica High School.

\*While the District Sustainability Department will be responsible for leading the implementation of the Sustainability Plan and all recommended strategies, the identified departmental "Key Stakeholders" will be responsible for working closely with the District sustainability team to strategize, plan, and implement the recommended sustainability strategies. The District considers sustainability to be the responsibility of all staff members, so collaboration and buy-in from these key stakeholders will be critical to the success of the plan.

RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>District Fleet Vehicles and Infrastructure Upgrades</b>			
Develop alternative vehicle and/or fuel efficiency standards for all new District fleet vehicles. Recommended standards include: <ul style="list-style-type: none"> <li>All-electric school buses starting in 2020.</li> <li>Hybrid or all-electric standard for sedan fleet vehicles.</li> </ul>	Funding Needed: Staff Time	1	Purchasing, Transportation
Evaluate the District's fleet vehicles and planned replacement schedule. Develop a transition plan to convert viable fleet vehicles to electric vehicles.	Funding Needed: Staff Time	1	Transportation
Designate priority parking spots for carpool and alternative fuel vehicles.	Funding Needed: General Fund	1	Transportation
Install additional bike racks at each District property to accommodate at least 10% of regular building occupants, with a goal to reach 20% capacity by 2030.	Funding Needed: Bond Program	2	M+O
Develop an implementation plan to install at least two EV charging stations at each District property by 2025 and at least five chargers at each site by 2030.	Funding Needed: Bond Program	2	Transportation, M+O
Research and evaluate emerging vehicle technology as part of the vehicle replacement process. Monitor the market for new hybrid or electric heavy-duty vans, pick-up trucks, and schools buses and consider these alternatives for replacement vehicles.	Currently Funded: Staff Time	3	Transportation, Purchasing
Evaluate the feasibility of replacing the remaining Malibu diesel bus with an all-electric bus.	Funding Needed: General Fund	3	Transportation
Partner with the City of Santa Monica to transition the existing CNG school buses to renewable natural gas using the Big Blue Bus fueling infrastructure.	Funding Needed: Staff Time	4	Transportation
<b>Commuter Support and Incentive Programs</b>			
Formally adopt the District's Transportation Demand Management Plan. Establish a Districtwide working group in partnership with the cities of Santa Monica and Malibu to strategize implementation.	Funding Needed: Staff Time	1	Transportation
Develop a Districtwide Safe Routes to School program plan to increase participation and resourcing for the use of alternative transportation options that are environmentally friendly and enhance student mobility.	Funding Needed: General Fund	1	Transportation

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Commuter Support and Incentive Programs</b>			
Conduct a Districtwide survey to evaluate staff interest in alternative transportation programs such as subsidized Big Blue Bus passes, Metro passes, Breeze Bike membership, and vanpool.	Funding Needed: Staff Time	1	HR, Communications
Conduct a Districtwide survey of student commuting practices and develop AVR goals.	Funding Needed: Staff Time	2	Transportation
Based on the results of the student survey, develop a Student Transportation Plan identifying strategies to increase student AVR.	Funding Needed: General Fund	2	Transportation
Host a “Meet Your Match” rideshare match party at the beginning of each academic year to encourage employee carpooling.	Funding Needed: Staff Time	3	HR, Communications
Partner with Santa Monica and Malibu to improve transit scheduling and service to school sites.	Funding Needed: Staff Time	3	Transportation
Register for Metro’s Guaranteed Ride Home program and promote the program through District communication channels.	Funding Needed: Staff Time	4	HR
Establish a Commuter Choice Program that allows employees to set aside pre-tax dollars via payroll to be used toward their monthly transportation costs.	Funding Needed: Staff Time	4	Payroll, HR
<b>Education and Engagement</b>			
Incentivize participation in the annual commuter survey through prize drawings and friendly competition.	Funding Needed: General Fund	1	Communications, Principals
Expand the Car-Free Fridays initiative to all properties across the District.	Funding Needed: Staff Time	1	Principals, PTA
Post public transportation and commuter program information on staff bulletin boards.	Funding Needed: Staff Time	1	Communications
Integrate information on alternative transportation and commuter support programs into New Hire Orientation. Update materials annually.	Funding Needed: Staff Time	2	HR
Use existing District communication channels to distribute fliers, announcements, and memos on alternative transportation and commute programs.	Funding Needed: Staff Time	3	Communications
Create a landing page on transportation program offerings and events on the District Intranet.	Funding Needed: Staff Time	3	IT, Communications
Leverage the Santa Monica Safe Routes to School communication channels to promote alternative school commuting and District events.	Funding Needed: Staff Time	4	Communications

# PROJECT COSTS AND FUNDING MECHANISMS



## PROGRAM COST SAVINGS

Several of the transportation program strategies have the potential to reduce the District's operation costs and free up capital that can be used to fund infrastructure improvements and on-going alternative transportation programs. The District has an opportunity to substantially reduce operating costs by decreasing the amount of parking the District leases from third-parties. By developing an alternative commute program, the District can simultaneously reduce costs while promoting the use of alternative transportation methods.

Transitioning the District's vehicles and other engine equipment to renewable fuels could also yield cost savings for the District. On average, electric vehicles cost half as much as conventional gasoline vehicles to fuel over the course of a year (U.S. Office of Energy Efficiency and Renewable Energy). Additionally, the production of renewable diesel generates cost offsets under California's Low Carbon Fuel Standard and the federal Renewable Fuel Standard, allowing fleets to purchase renewable diesel for prices at or below the price of conventional diesel. These potential cost savings can be used to offset the incremental cost increases associated with purchasing alternative fuel vehicles

### CASE STUDY

Leased parking for Santa Monica High School (SAMOHI) costs the District \$160 per month per parking space. To meet the existing demand for parking at SAMOHI, the District will need to lease an average of 210 parking spots per year over the next ten years. As an alternative, the District could provide transit passes, such as the annual Big Blue Bus pass, to staff who are willing to give up their parking space for only \$175 each. Assuming a 15% staff participation rate in an alternative commute program, the District could reduce the parking demand at SAMOHI by 63 spots, resulting in an **estimated annual savings of \$79,695**.

## IMPLEMENTATION COSTS

While implementation of the Transportation program initiatives will require capital investment for infrastructure improvements as well as on-going support of alternative transportation programs that provide viable alternatives to single occupancy vehicles, existing operational and capital funds earmarked for the transportation program and fleet vehicles can be redirected towards sustainable alternatives. The cost difference between conventional and alternative fuel vehicles is incremental, meaning there will be minimal financial impact to the District for selecting these alternatives during planned vehicle replacement.

The District can minimize the cost of providing alternative transportation programs by leveraging volume incentives. Programs such as the Big Blue Bus Blue to Business annual pass program are priced based on participation. Annual Blue to Business passes cost \$175 a piece with a 15% employee participation commitment, however the price drops to \$105 with a 30% employee commitment. These volume incentives should be pursued at all sites to minimize implementation costs.





## FUNDING OPPORTUNITIES

There are several grant and incentive programs offered by the State of California and utility providers that support alternative fuel vehicles and fueling infrastructure. The District should pursue these funding opportunities when purchasing new fleet vehicles and installing EV charging stations.

The *Clean Vehicle Rebate Project* is supported by the California Air Resources Board (CARB) and provides rebates to public agencies who purchase or lease zero-emission or plug-in hybrid light-duty vehicles. Public agencies are eligible for up to 30 vehicle rebates annually, so the District should pursue this rebate when replacing all light-duty fleet vehicles.

The California Energy Commission established the *School Bus Replacement Program* in 2017 to aid schools with replacing older diesel buses with zero-emission vehicles that improve children's health and limit the release of transportation-related air pollution. The District should apply for funds through this program when replacing the last diesel bus.

Rebates are available for the installation of EV charging infrastructure through the District's electric utility provider, Southern California Edison. The *Charge Ready* program provides rebates to commercial customers for installing level 1 or level 2 chargers. This rebate program should be leveraged for sites that do not qualify for free chargers as part of the Electrify America program.

### **AVAILABLE GRANTS:**

Clean Vehicle Rebate Project:

<https://cleanvehiclerebate.org/eng/fleet#block-views-pfp-faqs-block-1>.

School Bus Replacement Program:

<https://www.energy.ca.gov/transportation/schoolbus/index.html>

SCE Charge Ready Program:

<https://www.sce.com/wps/portal/home/business/electric-cars/Charge-Ready>



# **FOOD, NUTRITION + WELLNESS**



# FOOD, NUTRITION + WELLNESS

Food, nutrition, and wellness are important components of the District's whole child approach to education. Food serves as a critical nexus that connects issues relating to natural resources and the environment, nutrition and physical health, as well as cultural and regional issues that affect the local community. As such, the topic of food provides an opportunity for the District to educate and engage with students on a variety of interdisciplinary issues through a singular lens. Food systems also play a significant role in climate change and are responsible for an estimated 50% of global greenhouse gas emissions across the entire supply chain. In order to minimize the environmental impact of the food service program, the District is committed to supporting sustainable food systems by considering how food is produced, packaged, transported, and prepared. Recognizing the links between food, student learning capacity, and the environment, the District's Food, Nutrition & Wellness program promotes the adoption of best practices for sustainable food procurement, operations, nutrition, and wellness education.

## PERFORMANCE INDICATORS

### METRICS



#### Locally Sourced Produce

*Percentage of food products grown or raised within 250 miles of the District.*



#### Good Food Purchasing Program Goals

*Specific metrics to be developed by 2020.*



#### Health Education

*Percentage of students receiving formal health and nutrition education.*

## PROGRAM MISSION

Offer a healthy, nutritious, and environmentally sustainable Food Services program and promote student wellness by delivering nutrition and health education to all students.

## GOALS

### ONGOING

- Comply with Board Policy 3550 – *Food Service/Child Nutrition Program*

### 2020

- Adopt the Good Food Purchasing Program and develop procurement goals for 2, 5, and 10 years.
- Evaluate progress towards achieving the Student Wellness Policy Goals (BP E 5030) and develop an implementation plan.
- Develop a sustainable food and nutrition communications and marketing campaign.

### 2025

- Achieve the Year-5 Good Food Purchasing Program goals.
- Achieve all goals outlined in the Student Wellness Policy Goals (BP E 5030)
- Certify at least three school foodservice operations as sustainable dining operations.

### 2030

- Achieve the Year-10 Good Food Purchasing Program goals.
- Achieve zero waste in all District cafeterias.

# CURRENT INITIATIVES



## 1 SUSTAINABLE FOOD SOURCING

Board Policy 3510(a) – *Green School Operations* charges the Food and Nutrition Services Department with “providing fresh, unprocessed, organic food in the District’s food services program.” While sustainable food sourcing can be challenging for schools, it has been a consideration within the food service program for many years and the District has taken steps to identify and procure local, organic, and sustainable foods that promote student health and support sustainable food systems.

**Sustainable Food Procurement:** Over the last several years, the District has been working with their suppliers to transition food products and commodities to more sustainable alternatives. A majority of the produce sourced by the District is grown locally within the state of California, the teriyaki chicken is certified USDA Organic, and all-natural turkey breast has been adopted as a minimum standard. The District has an opportunity to formalize these initial efforts and establish an official sustainable food procurement program by adopting sustainable procurement values and establishing goals. The District will pursue participation in the Good Food Purchasing Program which provides a customizable, metrics-based framework for implementing an institutional sustainable food procurement program. The program will provide hands-on support to the District with planning, implementation, evaluation, and reporting, thereby removing some barriers to participation.

**Farmers Market Salad Bar:** In 1997, Food and Nutrition Services initiated the Farmers Market Salad Bar program at McKinley Elementary with a goal to increase students’ daily intake of fruits and vegetables, and to encourage the development of healthier eating habits. This program was expanded to all schools in the District and established the salad bar as a daily alternative to the hot lunch. While this program has been discontinued in recent years due to cost, it represents a best practice for student food and nutrition and should be re-evaluated as part of the District’s sustainable food program. The District should explore local partnerships and bulk purchasing with their vendors to reduce the cost of this program.



## 2 ★ SUSTAINABLE FOOD SERVICE OPERATIONS

**Reduced Packaging:** The Food and Nutrition Services Department strives to minimize the environmental impact of their operations by using environmentally preferable products/materials and adopting sustainability best practices. The Department has worked closely with their vendors to request products in bulk, minimize packaging, and reduce plastic waste. Initiated in 2017, 100% of the District's food vendors are now participating in the District's bulk distribution effort, which has resulted in a significant decrease in individually wrapped products and wasted packaging. The District should continue identifying opportunities to eliminate packaging waste and should include these considerations in RFPs and when selecting new products for purchase.



**Ocean Friendly Cafeterias:** Drawing inspiration from the Surfrider Foundation's Ocean Friendly Restaurant program, the District is developing an Ocean Friendly Cafeteria program for implementation across the District. One of the program's primary objectives is to transition all disposable plastic food service items to marine degradable alternatives, in line with the City of Santa Monica and Malibu legislation. While this effort represents an important commitment to reducing waste and preventing plastic pollution, transitioning to reusable dishware is the ultimate goal of the District and is a best practice. However, the District's facilities are not currently equipped with dishwashers or staff to handle dishwashing duties. These infrastructure and staffing issues need to be addressed before the District can take further steps to eliminate the use of disposable food service items.



**Green Cleaning Chemicals:** Food and Nutrition Services has also transitioned all of their routine cleaning chemicals to Green Seal Certified chemicals and eliminated the use of bleach and ammonia, which minimizes the negative health impacts of chemical use for both staff and students. These efforts represent best practices for food service operations and align with the District's commitment to sustainable operations.

**Feeding Forward:** Food and Nutrition Services is piloting a District food recovery program called Feeding Forward with a goal to eliminate food waste in the District. The program aims to collect and donate surplus produce and stable foods from the District's school cafeterias. All cafeterias are equipped with a food 'share table' where the surplus food items are collected for student consumption or donation. The cafeteria kitchens are also working to donate stable surplus items through Food Finders, a food recovery organization that transports surplus food to local shelters and food pantries. The District aims to expand this program to all school sites by 2020 and eliminate food waste.



## 3 **FOOD SERVICE FACILITY UPGRADES**

Dining facilities can provide valuable learning opportunities and reinforce lessons learned in the classroom. Therefore, transitioning the current Food Services model from heat-and-serve to scratch cooking will provide the District with opportunities to advance their sustainable food, nutrition, and wellness programs, but it will require substantial changes to the existing Food Services facilities and equipment. The District's existing food service facilities are outdated and not equipped to support full-scale scratch cooking or reusable dishware. The District's revised Educational Specifications, which were completed in 2018, address this issue and contain requirements that all new District facilities be equipped with full-service kitchens that can support scratch cooking and sustainable operational practices, such as the use of reusable dishware. In order to address the existing facilities, a Districtwide food service modernization project is under development which will upgrade the facilities to be more functional and efficient. Given the cost and effort associated with renovations of this scale, the project will prioritize the renovations based on need and will complete the upgrades on a phased schedule across the next ten years. These changes will support the preparation of fresh, sustainable foods and will improve the sustainability of the Food Services operations.

## 4 ★ **NUTRITION AND WELLNESS BOARD POLICIES**

Nutrition and student wellness are recognized by the District as critical components of ensuring that each student achieves their maximum potential. The District is committed to meeting and exceeding state and federal nutrition standards for food and beverages sold to students, and the Board believes that District-supplied foods should support a health curriculum and promote student wellness. To formalize these commitments, the District adopted Board Policy 3550 – *Food Service/Child Nutrition Program* in 2009 and Board Policy 3555 – *Nutritional Program Compliance* in 2011.

The District's interest in student wellness extends beyond food/nutrition and includes considerations for physical activity, health education, safe school environments, and emotional wellbeing. Board Policy 3050 – *Student Wellness* establishes goals and indicators for student wellness that the District can use to drive progress over time. To support these efforts, the District has also established a School Wellness Council responsible for implementing and reviewing health education programs. The District should engage with this group to identify additional opportunities to expand and improve on existing nutrition and wellness programs.



# CURRENT INITIATIVES



## 5

### FOOD AND NUTRITION EDUCATION

Food and nutrition education are cornerstones of the District's student wellness policy. Education Code 51210 requires that health education, including nutrition and food education, be taught in grades 1-6; however, research has found that healthy eating habits are directly correlated with exposure to nutrition education, so the District is committed to providing consistent nutrition education to all students K-12. A variety of food and nutrition education programs have been developed to provide both in-classroom and out of classroom exposure to these issues.

**Curriculum Integration:** Nutrition education is being integrated into the District's curriculum using science, math, language arts, history, and other subject matter areas. cmaterial consistent with the recommendations made in the Dietary Guidelines for Americans. The District will ensure that food and nutrition education continue to be incorporated into curriculum materials throughout the transition to the Next Generation Science Standards.



- ★ **School Gardens:** The District's school gardens provide a critical outlet for educating students about food systems, the environment, and nutrition through hands-on activities. While the food production potential of these gardens remains low, they reinforce all aspects of the food, nutrition, and wellness program by promoting environmental literacy, knowledge of food systems, and exposing students to healthy eating in an accessible setting. The Garden Education Program curriculum provides formal educational content supporting these learning outcomes and should be expanded Districtwide. The District's Student Wellness Policy goals encourage all schools in the District to develop and maintain school gardens as part of their educational program, so the District will continue to explore mechanisms for funding and supporting school gardens.





# RECOMMENDED STRATEGIES

The recommended strategies for the Food, Nutrition + Wellness program include recommendations for expanding sustainable food sourcing, sustainable operational practices, and the promotion of student health and wellness through educational programs. These strategies will support and augment the existing food and nutrition programs and institutionalize best practices Districtwide.

\*While the District Sustainability Department will be responsible for leading the implementation of the Sustainability Plan and all recommended strategies, the identified departmental “Key Stakeholders” will be responsible for working closely with the District sustainability team to strategize, plan, and implement the recommended sustainability strategies. The District considers sustainability to be the responsibility of all staff members, so collaboration and buy-in from these key stakeholders will be critical to the success of the plan.

RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Sustainable Food and Nutrition</b>			
Establish a District Sustainable Food Working Group to review the baseline requirements and commitments of adopting the Good Food Purchasing Program: <a href="https://goodfoodpurchasing.org/">https://goodfoodpurchasing.org/</a> .	Funding Needed: Staff Time	1	Food Services, Purchasing
Network with other local school districts such as LAUSD to learn about sustainable food sourcing best practices and lessons learned.	No Additional Funding Needed	1	Food Services, Purchasing
Conduct a gap analysis on the goals outlined in the Student Wellness Policy Goals (BP E 5030) and develop an action plan to achieve all goals by 2025.	Funding Needed: Staff Time	1	Wellness Committee, Food Services
Formally adopt the Good Food Purchasing Program and engage with the Center for Good Food Purchasing to initiate the planning and assessment phase.	No Additional Funding Needed	1	Food Services, Board of Education
Incorporate sustainable food criteria and reporting requirements into new food RFPs and contracts.	No Additional Funding Needed	2	Food Services, Purchasing
Engage the District’s food purchasing co-op members in a discussion about group sustainable procurement interest and opportunities. Strategize procurement of sustainable commodities.	Funding Needed: Staff Time	2	Food Services, Purchasing
Evaluate nutrition standards and menu development processes to identify opportunities to increase vegetarian/vegan offerings.	No Additional Funding Needed	2	Food Services
Develop and adopt a Sustainable Food Board Policy that outlines the District’s sustainable food procurement values based on the Good Food Purchasing Program and the Cool Foods Campaign guidelines: <a href="https://www.centerforfoodsafety.org/issues/305/food-and-climate/about-the-cool-foods-campaign">https://www.centerforfoodsafety.org/issues/305/food-and-climate/about-the-cool-foods-campaign</a>	Funding Needed: Staff Time	2	Food Services, Educational Services
Integrate on-site food production planning into the school garden revitalization plans, with a goal to supply a portion of the daily seasonal salad bar through on-site production by 2030.	Funding Needed: Staff Time	3	Food Services, Educational Services
Working with the Center for Good Food Purchasing, develop an implementation plan outlining the key milestones, schedule, and team roles for Phase 1 (baseline assessment and goal setting) of implementing the Good Food Purchasing Program	Funding Needed: Staff Time	3	Food Services

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Sustainable Food and Nutrition</b>			
Evaluate the District's current food sourcing practices against the Good Food Purchasing Program criteria and establish a sustainable food procurement baseline.	Funding Needed: Staff Time	3	Food Services
Develop 2-year, 5-year, and 10-year procurement goals in each of the five Good Food categories that address low-hanging fruit and high-impact opportunities.	Funding Needed: Staff Time	4	Food Services
With assistance from the Center for Good Food Purchasing, establish a protocol for annual sustainable food purchasing data collection and tracking.	Funding Needed: Staff Time	4	Food Services
Conduct an analysis of the WELL Building Standard Nourishment credits to determine the credit earning potential of existing food and nutrition programs.	Funding Needed: General Fund	4	Food Services, Facility Improvement Projects
<b>Food Service Operations</b>			
Develop a phased implementation plan for completing the food service facility upgrade projects. Prioritize equipment replacement and renovations based on energy savings and the needs of the Food and Nutrition Services Department.	Currently Funded: Bond Program	1	Facility Improvement Projects, Food Services
Incorporate dish washers into the Educational Specifications as required equipment for all food service facilities. Evaluate the staffing needs to support the use of reusable dishware.	No Additional Funding Needed	1	Facility Improvement Projects, Food Services
Develop a plan and timeline for expanding the Feeding Forward program Districtwide by 2020.	Funding Needed: Staff Time	1	Food Services
Develop a Food and Nutrition Services marketing program and associated materials to communicate about nutrition, sustainable food, and food systems within the dining facilities.	Funding Needed: General Fund	1	Food Services, Wellness Committee
Integrate specifications for bulk distribution and minimized packaging into food RFPs and contracts. Eliminate the purchase of individually wrapped products.	No Additional Funding Needed	2	Food Services, Purchasing
In conjunction with the marketing program, implement a "Green Mondays" campaign to encourage students and staff to choose sustainable meal options on Mondays, such as eating less meat or selecting the Farmers Market Salad Bar. <a href="http://greenmonday.org/school_program/">http://greenmonday.org/school_program/</a>	Funding Needed: Staff Time	2	Food Services, Wellness Committee
Identify opportunities to add dishwashers to existing food service facilities and develop a plan to install dishwashers in all viable facilities by 2025.	Funding Needed: Bond Program	2	Facility Improvement Projects, Food Services
Select a facility to pilot the use of reusable flatware.	Funding Needed: General Fund	2	Food Services
Develop a process for routinely evaluating chemicals, paper products, and disposable goods to identify opportunities to transition to sustainable alternatives, in alignment with the District's Environmentally Preferable Purchasing program.	Funding Needed: Staff Time	3	Food Services, Purchasing

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Food Service Operations</b>			
Develop a process for routinely evaluating packing and waste minimization opportunities for food products and supplies.	Funding Needed: Staff Time	3	Food Services, Purchasing
Evaluate the feasibility of developing a weekly “Green Mondays” menu special that features local, organic, or sustainable menu items, such as vegetarian entrees.	Funding Needed: Staff Time	3	Food Services
Develop a phased implementation schedule to replace all single-serve milk cartons with chilled milk dispensers by 2025.	Funding Needed: General Fund	4	Food Services
Conduct a review of sustainable dining operation certification programs such as the Green Restaurant Association, Green Seal for Restaurants, and the REAL Certification to select a program that best aligns with the District’s goals.	Funding Needed: Staff Time	4	Food Services
Evaluate the District’s existing dining facilities and select three target facilities for certification as sustainable dining operations. The evaluation should consider the criteria of the selected certification program.	Funding Needed: Staff Time	4	Food Services
<b>Education and Engagement</b>			
Work with the District Science Leadership Team to connect food, sustainability, and nutrition initiatives to curriculum materials as part of the NGSS implementation plan.	Funding Needed: General Fund	1	Educational Services, Food Services
Allocate funding to support the expansion of the Garden Education program across the District.	Funding Needed: General Fund	1	Educational Services
Develop a tailored sustainable food and nutrition educational program for Food Services staff to develop buy-in and provide training on their role.	No Additional Funding Needed	2	Food Services
Use District social media outlets to share information and highlights on the food, nutrition, and wellness efforts, such as food sourcing, educational programs, and sustainable operations.	No Additional Funding Needed	2	Food Services, Communications
Expand the scope of the Student Wellness Council activities to include sustainable food education.	Funding Needed: Staff Time	3	Wellness Council
Provide teachers with access to sustainable food and nutrition curriculum resources as part of the curriculum guides: <ul style="list-style-type: none"> <li><a href="http://www.sustainabletable.org/5162/teaching-and-educator-resources">http://www.sustainabletable.org/5162/teaching-and-educator-resources</a></li> <li><a href="http://goodfood.ucla.edu/k-12-school-food-resource-toolkit/curriculum">http://goodfood.ucla.edu/k-12-school-food-resource-toolkit/curriculum</a></li> <li><a href="http://goodfood.ucla.edu/k-12-school-food-resource-toolkit/curriculum/seeds-plate">http://goodfood.ucla.edu/k-12-school-food-resource-toolkit/curriculum/seeds-plate</a></li> <li><a href="http://uccalfresh.org/curriculum/youth-materials">http://uccalfresh.org/curriculum/youth-materials</a></li> <li><a href="https://cns.ucdavis.edu/resources/classroom/cook-healthy-choices">https://cns.ucdavis.edu/resources/classroom/cook-healthy-choices</a></li> </ul>	No Additional Funding Needed	3	Educational Servicers
Create a webpage under the Food and Nutrition Services Department website to provide information on sustainable food sourcing and sustainable operations.	Funding Needed: Staff Time	4	Food Services, IT
Using the <i>Rethinking School Lunch Framework</i> as a guide, develop an integrated approach for advancing sustainable food, operations, nutrition, education, and wellness efforts. <a href="https://www.ecoliteracy.org/sites/default/files/rethinking_school_lunch_guide.pdf">https://www.ecoliteracy.org/sites/default/files/rethinking_school_lunch_guide.pdf</a>	Funding Needed: Staff Time	4	Food Services, Wellness Committee, Educational Services

# PROJECT COSTS AND FUNDING MECHANISMS



## PROGRAM COST SAVINGS

No direct cost savings are anticipated as a result of the food, nutrition, and wellness programs.

## IMPLEMENTATION COSTS

While the food, nutrition, and wellness programs are anticipated to add value to the District's students, educational programs, and operations, the implementation of these programs will require investment from the District. Program implementation costs are expected to include on-going operational costs for new educational programs, maintenance of school gardens, and the procurement of sustainable food items, which may have a cost premium compared to their conventional counterparts. To minimize the additional costs associated with sustainable food procurement, the District should explore collaboration opportunities with their existing purchasing co-op to leverage purchasing volume and reduce costs. Capital investment will also be required to transition the District's existing food service facilities to full-service kitchens that can support scratch cooking. Utility rebate and incentive programs will be pursued to minimize and offset the cost of these facility upgrades.

## GRANT FUNDING

Grant funding opportunities may be available to the District to offset the implementation and management costs associated with the recommended food, nutrition, and wellness programs. The U.S. Department of Agriculture and the California Department of Education offer a variety of relevant grants that support programs such as school gardens, serving fresh fruits and vegetables, and food service equipment upgrades. Funding availability may change overtime as programs are expended and new programs become available. The District should use the following grant resource tools to search for grants and funding opportunities:

### **Grant Research Tools:**

<https://www.greenschoolsalliance.org/resources/category/1>

<https://www.fns.usda.gov/grant-opportunities/school-meals>

<https://www.cde.ca.gov/fg/fo/sf/>

<https://kidsgardening.org/grant-opportunities/>

<https://www.wholekidsfoundation.org/schools/programs/school-garden-grant-program>

<https://www.natureworkseverywhere.org/grants/> -



# **GREEN BUILDING + OPERATIONS**

# GREEN BUILDING + OPERATIONS



The green building and operations program will support and reinforce all aspects of the sustainability plan by considering material selection, energy and water impacts, waste management, and other sustainability factors in the District's facility design, capital construction, and daily operational practices. The District's Collaborative for High Performance Schools (CHPS) Green Building Resolution, adopted in 2003, forms the foundation for the green building program. Drawing from the CHPS guidance, the District is establishing policies that minimize the life-cycle environmental impact of buildings through sustainable and regulatory compliant design and construction, maximize the procurement of environmentally preferable and socially responsible products and services where available, and improve the environmental health of the District. This program will also consider the procedures that govern routine maintenance activities such as cleaning and pest management.

The green building and operations program also strives to align the District's capital construction and operations programs to bring a life-cycle perspective to all construction and operational decision-making processes. These efforts will ensure that District facilities not only meet the needs of the education program, but are also high-performing, healthy, and cost-effective over time.

## PROGRAM MISSION

Provide sustainable, healthy, and safe environments for the District community through the adoption of sustainable building design principals, construction methods, and operational practices that minimize environmental impact and maximize health.

## PERFORMANCE INDICATORS

### METRICS



#### Green Building Certifications

*Percentage of qualifying projects that achieve the District's CHPS goals for 2020, 2025, and 2030.*



#### Sustainable Purchasing

*Specific metrics to be developed by 2020.*

## GOALS

2020

- All new buildings shall be designed to use ten percent (10%) less energy than the allowed energy budget established by the 2016 California Energy Code.
- All new buildings and major renovations to achieve CHPS Verified™ and exceed the minimum CHPS Designed™ qualifying point count by 25%.
- Adopt a Sustainable Purchasing Policy and Environmentally Preferable Purchasing (EPP) guidelines and develop sustainable purchasing goals in key product and service categories.

2025

- Adopt CA Green Building Standards Chapter 11, Title 24 (CALGreen) Nonresidential Tier 2 Voluntary Measures as mandatory and incorporate into the District's Sustainability Design Guidelines.
- All new buildings and major renovations to consider WELL Certification Silver.

2030

- All new buildings to be Zero Net Energy (ZNE); and 50% of existing buildings to be retrofitted to ZNE.
- All new buildings and major renovations to achieve CHPS Verified Leader™.

# CURRENT INITIATIVES



## 1 BOARD POLICIES

The District's Green School Operations Board Policy (BP 3510(a)) identifies green building practices, sustainable operations, and environmentally preferable purchasing as key District priorities. It charges the District's capital construction program with considering green building standards, sustainability, and student health as primary factors in facility construction, modernization projects, and decision-making surrounding site selecting, building design, and landscaping/grounds decisions. The policy also requires that the District purchase environmentally preferable products and services that minimize environmental impacts and hazards, contain postconsumer recycled content, are durable and long-lasting, conserve energy and water, and produce a low amount of waste whenever practical. The selection of least toxic, independently certified green cleaning products and high-efficiency cleaning equipment are also identified as high-priority initiatives. These policies provide foundational support for many aspects of the sustainability program and will be critical for ensuring continual improvement.



## 2 ★ GREEN BUILDING STANDARDS

When it comes to green building, the District's commitment goes beyond policy. Green building specifications and sustainability goals have been deeply embedded into the District's design and construction documents and procedures, which aim to provide safe and healthy environments for building occupants, while minimizing the impact on the local, regional, and global environment.

**Sustainable Design Criteria:** The District's sustainable design criteria provide robust green building requirements that are applied to all construction and modernization projects. The criteria are based on the [Collaborative for High Performance Schools](#) (CHPS) framework and guidance from the Leadership in Energy and Environmental Design (LEED) rating system<sup>1</sup>. CHPS provides comprehensive guidelines for designing high-performance and healthy K-12 schools that support student achievement, including robust sustainable design guidelines. The District's project specifications and design documents that guide the District's green building program include:

- Section 01 35 14: CHPS Credit Summary
- Section 01 35 15: CHPS Certification Procedures
- Section 01 74 19: Construction Waste Management and Disposal
- Section 01 81 13: Sustainable Design Requirements
- SMMUSD Educational Specifications (See next page)

★ Indicates existing programs or initiatives that are considered a best practice.

<sup>1</sup> Sustainability criteria related to LEED is included in the 2018-19 District's Educational Specifications update.

# CURRENT INITIATIVES



The District's Sustainable Design Requirements (Specification Section 01 81 13) address the CHPS criteria and related design considerations on a wide-range of topics such as energy and water efficiency; daylighting opportunities; the use of recycled, regional, and low-carbon impact building materials; indoor environmental and air quality; building orientation and envelope design; stormwater collection and treatment; and pollution minimization. Sustainable design standards are also included in the District Educational Specifications currently being updated for release in 2019. These standards represent best practices in green building and will be updated by the District as standards evolve and new technologies emerge.

The District's design standard goals are based on a progressively more aggressive achievement of CHPS levels through 2030:

- All new buildings and major renovations to exceed the minimum CHPS Designed™ qualifying point count by 25% by 2020;
- All new buildings and major renovations to achieve CHPS Verified™ by 2025; and
- All new buildings and major renovations to achieve CHPS Verified Leader™ by 2030.

**California Building Standards Code:** The District's green building requirements include compliance to the [California Building Standards Code](#) (California Code of Regulations, Title 24) Part 6, California Energy Code and Part 11, California Green Building Standards Code (CALGreen) for Nonresidential. The District is committed to designing its new construction and major renovation projects to exceed regulatory code requirements and strives to align with the regulatory code commitments by the City of Santa Monica, specifically:



- All new buildings shall be designed to use ten percent (10%) less energy than the allowed energy budget established by the 2016 California Energy Code by 2020;
- Adopt CA Green Building Standards Chapter 11, Title 24 (CALGreen) Nonresidential Tier 2 Voluntary Measures as mandatory by 2025;
- All new buildings shall be Zero Net Energy (ZNE) by 2030; and 50% of existing buildings to be retrofitted to ZNE by 2030.

The District will implement the definition for ZNE used in Title 24, Part 6 (Energy Code) and Title 24, Part 11 (CALGreen), which aligns with the City of Santa Monica's ZNE definition:

**Construction Waste Management:** The District's Construction Waste Management and Disposal specifications require that all projects develop a waste management plan to identify strategies for reusing, salvaging, or disposing of non-hazardous waste materials generated during construction and demolition activities. Projects generating C+D waste must collect and separate the waste, track and report on all waste generated, and recycle or salvage a minimum of 75% of the waste. This policy fosters material recovery and re-use as first-priority waste management strategies and minimizes the disposal of C+D waste in landfills.

*A ZNE Code Building is one where the value of the energy produced by on-site renewable energy resources is equal to the value of the energy consumed annually by the building measured using the California Energy Commission's Time Dependent Valuation (TDV) metric.*

# CURRENT INITIATIVES



## 3

### EDUCATIONAL SPECIFICATIONS

The District's new Educational Specifications, to be adopted in 2019, include additional requirements for green building design and planning considerations.

The design specifications target sustainable materials and indoor environmental health, which augment and reinforce the District's other green building commitments. Interior building materials are required to comply with LEED criteria from several Materials & Resources and Indoor Environmental Quality credits. The Specifications emphasize the use of natural materials that not only employ sustainability principals, but also contribute to student performance and reinforce the health and wellness components of the District's education program. The potential for positive reinforcement between the District's instruction space and student performance will be further prioritized as part of the green building program, with a goal to design facilities that support academic success and can themselves be a source of sustainability education for students, teachers, and the District community. The updated Educational Specifications also support the implementation of this sustainability plan broadly by including requirements for teaching gardens, functional kitchens, natural lighting, and other facilities that support aspects of the District's sustainability program.



## 4



### GREEN BUILDING IN PRACTICE

The District recognizes the importance of using sustainable design strategies and innovative technologies in order to minimize the environmental impact and improve the health and performance of District facilities. Several innovative materials and design strategies have been used by the District in recent projects that demonstrate the commitment to both sustainability and performance. Strategies recommended by the CHPS

framework and featured in recent projects include:

- Solar photovoltaic panels
- Day lighting
- Natural ventilation
- Bio-swales, rainwater collection, filtration and re-use for irrigation
- Green roofs
- Reduction of urban heat island effect
- Outdoor learning and gathering spaces
- Low-emitting materials

**Fly Ash Concrete:** The District has made a concerted effort to replace a portion of the cement needed for construction and modernization projects with fly ash concrete. Fly ash is generated through combustion and captured prior to release into the atmosphere to prevent air pollution. In addition to providing a more durable alternative to cement, fly ash concrete requires 10% less water, saves energy, reduces GHG emissions, and prevents the disposal of this material in landfill. For every ton of fly ash used instead of cement, enough energy is saved to provide electricity to an average American home for 24 hours. Fly ash concrete has been incorporated into projects at SAMOHI, John Adams Middle School, and other District locations.



# CURRENT INITIATIVES



**Solar Chimneys:** Solar chimneys were used as an energy efficiency and cost saving design measure at John Adams Middle School. Solar chimneys decrease the need for traditional air conditioning systems by improving the natural ventilation of a building. Using a small, solar-powered fan inside the intake vents, fresh air is pushed through tubes located 8-feet below the ground. The lower temperature of the earth naturally cools the air, which then displaces the warm interior air as it rises. This continuous flow of air helps to naturally cool classrooms and reduces the District's reliance on air conditioning.

## 5 ★ **BRANCHING OUT TREE NURSERY**

Over the next 25 years, Santa Monica High School will undergo a major campus remodel which will displace many of its existing trees. Concerned about the loss of tree cover and the cost of mature tree replacements, an idea was sprouted for the District to grow replacement trees on site and use the project as an educational opportunity for SAMOHI students. The SAMOHI Branching Out Tree Nursery, which was dedicated in September 2018, will propagate 89 native trees and over 100 high-value shrubs from seeds to replace the vegetation lost during construction. This program demonstrates the District's commitment to not only integrating sustainability considerations into construction but doing so in a way that furthers student learning. The tree nursery will also be incorporated into the curriculum as an interactive learning experience that allows students to explore topics of soil, tree health, propagation, pH levels, microorganisms, water, ecology and urban forestry.



## 6 **INTEGRATED PEST MANAGEMENT**

Routine operational activities such as pest management can have significant implications for the health of the District's students and staff. While pests can pose significant problems and risks to the District, the pesticides and chemicals traditionally used to solve these problems carry their own risk. Recognizing the potential health hazards associated with these chemicals, especially for small children, the District maintains a Least-Hazardous Integrated Pest Management (IPM) Policy focused on developing long-term pest prevention methods that give preference to non-chemical methods when selecting appropriate control measures. The District is committed to providing safe and effective pest control that protects students, staff, the environment, and District properties and assets. However, the District's IPM policy hasn't been revised since May 2011. In order to ensure that the District continues to implement best IPM practices that provide a safe and healthy environment crucial for student performance, the District should revise and update the IPM Policy to add additional enforcement mechanisms and further prioritize non-chemical control measures. The District should reference local best practices, such as the City of Malibu's Earth Friendly Pest Management Policy, when updating this program.

## 7 **SUSTAINABLE PURCHASING**

In alignment with the sustainable purchasing direction in the Green School Operations Board Policy, the District increasingly considers the immediate and life-cycle impacts of the products purchased for use. Recognizing the impacts of chemicals used for cleaning on human health and the environment, the District seeks recommended alternatives at every opportunity. The Food and Nutritional Services Department was an early leader in this area and eliminated the use of all chemicals that contain bleach and ammonia. A process is underway to evaluate other chemicals currently in use and identify viable environmentally friendly alternatives. Additionally, the District has established vendor take-back programs for printer cartridges and projector bulbs, which is considered a best practice for hard to recycle materials. In addition to policies reducing plastic food service waste, these programs put sustainable purchasing practices into action. It is recommended that the District formalize these sustainable procurement efforts by establishing an Environmentally Preferable Purchasing (EPP) policy to integrate environmental and social considerations into all purchasing decisions.



# RECOMMENDED STRATEGIES

The recommended strategies for the green building and operations program target the District’s facility design, capital construction, and daily operational practices in order to improve District health, student academic performance, and facility efficiency. The green building recommendations are focused on integrating innovative design and climate protection strategies into the District’s existing design specifications and decision-making processes. They also address the need for additional climate resiliency considerations and community partnerships. The operations and maintenance recommendations focus on developing the procedures and guidelines needed to ensure that sustainable procurement and operations standards are implemented and followed over time. These recommendations will augment and support all other areas of the sustainability plan.

\*While the District Sustainability Department will be responsible for leading the implementation of the Sustainability Plan and all recommended strategies, the identified departmental “Key Stakeholders” will be responsible for working closely with the District sustainability team to strategize, plan, and implement the recommended sustainability strategies. The District considers sustainability to be the responsibility of all staff members, so collaboration and buy-in from these key stakeholders will be critical to the success of the plan.

RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Green Building</b>			
Establish a formal sustainability review process during the project design phase to identify sustainability implications of construction and demolition, such as water use, tree removal, waste management, selection of landscaping plant palettes, and review design choices.	Funding Needed: Staff Time	1	Facility Improvement Projects
Participate in SCE’s “Saving By Design” program for new construction projects.	No Additional Funding Needed	1	Facility Improvement Projects
Identify and mandate achievement of priority CHPS credits for all capital projects.	Funding Needed: Staff Time	1	Facility Improvement Projects
Prioritize the use of cool materials and urban greening strategies in design to combat the heat island effect and mitigate the impact of high heat days.	Funding Needed: Bond Program	1	Facility Improvement Projects
Explore the feasibility of electrifying equipment as part of project design.	Funding Needed: Bond Program	1	Facility Improvement Projects
Establish a District policy for tree selection and replacement. Utilize the tree health database and recommendations from the City of Santa Monica, City of Malibu, and Urban Forest Task Force to guide decision making on tree removal and replacement. All trees removed during construction will be replaced in numbers consistent with the City of Santa Monica Tree Valuation Protocol.	Funding Needed: Bond Program & General Fund	2	Facility Improvement Projects, M&O
Engage with local experts and City leaders to align green building strategies and design specifications with emerging best practices and regional priorities.	Funding Needed: Staff Time	2	Facility Improvement Projects
Revise the District’s system specifications to include standards for irrigation controls, EMS, and other systems that require compatibility District-wide.	Funding Needed: Bond Program	2	Facility Improvement Projects
Develop District commissioning authority procedures and requirements to oversee project commissioning submittals and service deliverables.	Funding Needed: Bond Program	2	Facility Improvement Projects

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Green Building</b>			
Establish a District resiliency task force with District, City, and community representatives to evaluate the existing design specifications and identify opportunities integrate additional resiliency guidelines/requirements.	Funding Needed: Staff Time	2	Facility Improvement Projects
Include M+O staff in design review to discuss the ongoing maintenance and operations needs of new facilities, systems, and landscaping.	Funding Needed: Staff Time	3	Facility Improvement Projects, M+O
Use a Life-Cycle Cost Analysis (LCCA) approach to inform decision making for all new construction and modernization projects.	Funding Needed: Bond Program	3	Facility Improvement Projects
Evaluate upcoming capital projects and select a site to pursue WELL Certification as a pilot.	Funding Needed: Staff Time	3	Facility Improvement Projects
Explore the feasibility of adopting the WELL Certification Silver as a minimum certification standard for qualifying District projects.	Funding Needed: Bond Program	3	Facility Improvement Projects
Evaluate best management practices and emerging markets for diverting C&D waste as part of the waste management plan development process for construction projects.	Funding Needed: Staff Time	4	Facility Improvement Projects
Review the Sustainable Design Guidelines every five years and update the specifications to include new standards and emerging technologies, with a focus on climate neutrality and resiliency.	Funding Needed: Bond Program	4	Facility Improvement Projects
Revise the Facilities Concepts and Roles Board Policy (BP 7000) to include supporting sustainability as a core function of the District's Facilities department.	Funding Needed: Staff Time	4	Board of Education, Facility Improvement Projects, M+O
<b>Sustainable Operations</b>			
Review and update the District's existing green cleaning SOPs to integrate the CHPS and WELL Building Standard green cleaning protocols.	Funding Needed: Staff Time	1	M+O
Update the Integrated Pest Management Policy to add additional monitoring and enforcement mechanisms and further prioritize the use of non-chemical control measures.	Funding Needed: Staff Time	1	Board of Education, M+O
Develop an operations working group and use the CHPS Operations Report Card program framework to evaluate and benchmark operational practices. <a href="https://chps.net/operations-report-card-orc">https://chps.net/operations-report-card-orc</a>	Funding Needed: Staff Time	2	M+O
Develop a sustainable operations training program for M+O staff covering topics such as green cleaning, pest management, and other topics as determined by the CHPS Operations Report Card.	Funding Needed: General Fund	3	M+O
Establish a policy and standards for operations and maintenance training to be included in the RFP scope of work for all new building systems and equipment.	Funding Needed: Staff Time	4	Facility Improvement Projects, Purchasing
<b>Material Procurement</b>			
Establish a Districtwide sustainable purchasing working group to evaluate opportunities to improve the District's procurement practices.	Funding Needed: Staff Time	1	Purchasing, M+O, Food Services
Assess the District's top 10 purchasing categories by spend to determine areas of concern and opportunities to transition to environmentally preferable alternatives.	Funding Needed: Staff Time	1	Purchasing

# RECOMMENDED STRATEGIES



RECOMMENDED STRATEGIES	RESOURCES NEEDED	PRIORITY LEVEL	KEY STAKEHOLDER*
<b>Material Procurement</b>			
Assess the District's top 10 purchasing categories by spend to determine areas of concern and opportunities to transition to environmentally preferable alternatives.	Funding Needed: Staff Time	1	Purchasing
Referencing the Environmental Protection Agency's (EPA) Environmentally Preferable Purchasing Program, develop an Environmentally Preferable Purchasing policy that includes criteria such as: <ul style="list-style-type: none"> <li>Product has earned a third-party environmental or socially responsible certification including but not limited to: Green Seal, EcoLogo, BPI Certified, Cradle-to-Cradle, Energy Star, WaterSense, EPEAT, GREENGUARD, and Fair Trade</li> <li>Product contains recycled content</li> <li>Product is reusable or recyclable</li> <li>Product is designed with minimal packaging</li> <li>Product manufacturer operates or participates in take-back programs</li> <li>Product is made of a rapidly renewable material</li> <li>Product is a low/no VOC alternative</li> <li>Product is non-toxic and/or biodegradable</li> <li>Product is considered environmentally preferable over competitors</li> <li>Product promotes resource efficiency</li> </ul> <a href="https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program">https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program</a>	Funding Needed: Staff Time	1	Purchasing, M+O, Food Services
Use the WELL Building standards and CHPS guidance to inform specific purchasing criteria and guidelines for the purchase of: furniture and fixtures, interior paints and coatings, interior adhesives and sealants, flooring, insulation, and pesticide use.	Funding Needed: Staff Time	2	Purchasing, M+O
Revise District standard product specifications for routinely purchased equipment and supplies such as printer paper, cleaning chemicals, sanitary paper products, trash bags, lighting, and office supplies.	Funding Needed: Staff Time	2	M+O, Purchasing
Establish a formal process for considering sustainability in procurement of District services.	Funding Needed: Staff Time	3	Purchasing
Explore the feasibility of converting white board markers to a refillable variety.	Funding Needed: Staff Time	3	Purchasing
Explore the feasibility of joining the Green Schools Alliance Purchasing Solution program to reduce cost and logistics barriers to sustainable purchasing. <a href="https://www.greenschoolsalliance.org/purchasing">https://www.greenschoolsalliance.org/purchasing</a>	Funding Needed: Staff Time	4	Purchasing
Use the CalRecycle "Environmentally Preferable Purchasing for Schools" resource to guide implementation of the EPP policy. <a href="https://www.calrecycle.ca.gov/ReduceWaste/Schools/Purchasing/#Getting">https://www.calrecycle.ca.gov/ReduceWaste/Schools/Purchasing/#Getting</a>	Funding Needed: Staff Time	4	Purchasing
Evaluate the feasibility of participating in the Carbon Disclosure Project to have District vendors report on their supply chain impacts.	Funding Needed: Staff Time	4	Purchasing

# PROJECT COSTS AND FUNDING MECHANISMS



## PROGRAM COST SAVINGS

Green building and operations strategies have the potential to yield cost savings for the District by producing higher performing buildings, minimizing the generation of waste, and promoting material efficiency. While some green building strategies and systems may have higher up-front costs when compared to conventional building strategies, they will reduce operating costs over time and benefit the District in the long-term. Integrating sustainability and efficiency considerations at the design phase will also prevent additional costs to the District in the operations phase to retrofit or modify systems.

## IMPLEMENTATION COSTS

In addition to one-time capital costs for construction, the green buildings and operations program will require on-going, operational funding to support sustainable operational practices and purchasing decisions. Sustainable goods and services may be more expensive than conventional products in some categories, but environmentally preferable alternatives are becoming more cost competitive with conventional products as the market expands. The District should explore joining the Green Schools Alliance Purchasing Solution program in order to take advantage of special pricing and purchasing discounts.

## FUNDING OPPORTUNITIES

Financial support through SCE's "Savings By Design" program can reduce the up-front cost of implementing green building strategies. Savings By Design provides incentives for the integration of energy efficiency strategies and promotes the use of innovative energy design features. Additionally, the Bright Schools Program offered by the California Energy Commission can support the District with green building efforts by providing design review services and developing performance standards and RFP specifications at no cost. These programs and other funding opportunities may change over time as funds become available and are expended. The EPA Green Building resource website contains a list of green building financing programs, incentives, and other funding opportunities that may be available to the District. This website should be monitored for new programs that will minimize the cost of the green building program.

### **AVAILABLE FUNDING PROGRAMS:**

<https://www.savingsbydesign.com/start-here/what-is-sbd/>

<https://www.energy.ca.gov/efficiency/brightschoools/>

<https://archive.epa.gov/greenbuilding/web/html/funding.html#guides>



# IMPLEMENTATION

# IMPLEMENTATION

Successful implementation of the District's Sustainability Plan will require top-down leadership, the development of ongoing program management structures, the allocation of additional staffing and financial resources, a commitment to monitoring and reporting, and an effective communications strategy. Together, these elements will ensure that all parts of the plan work together and that there is adequate political and financial capital to support the foundational integration of sustainability values and practices into District operations and decision-making processes.

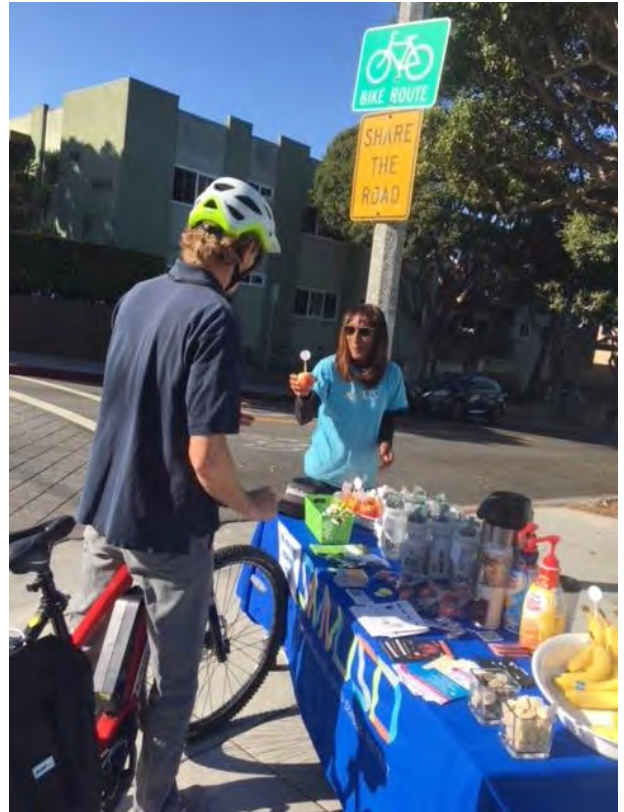
The following sections address the necessary steps that will be taken to ensure the successful implementation of the District's Sustainability Plan.

## LEADERSHIP

The District's Board of Education demonstrated leadership by initiating the development of this Sustainability Plan, and their ongoing leadership and direction will play a critical role in driving implementation. Internally, the Board has a critical role to play in signaling to the District's staff, students, parents, and community members that sustainability is essential and time sensitive. The Board and other District leaders must take an active approach to driving implementation by formally adopting this plan and charging key stakeholders with executing its vision. Only with this top-down leadership will the District be able to fundamentally influence its strategic direction and the way it operates day to day.

To further demonstrate leadership on sustainability, it is recommended that the District sign the Green Schools Alliance Sustainability Leadership Commitment, which represents a public pledge to take meaningful action to improve sustainability and engage with the community to drive transformative change.

Beyond the District's boundaries, the Board's leadership will be necessary to forge strategic partnerships with public and private partners to accomplish the Sustainability Plan's vision. Existing relationships with local cities and organizations should be strengthened and new collaboration opportunities should be identified to drive innovation, with a specific focus on the recommended partnerships identified throughout this plan. The District should also join the Green Schools Alliance District Collaborative to connect with other school districts pursuing similar goals and build a community of leadership for sustainability.



*“Our school or district will set goals, take action, and monitor and share progress in the three sustainability leadership action areas: reduce our climate and ecological impact; educate and engage community; and transform our institutional culture.”*

– Sustainability Leadership  
Commitment, Green Schools Alliance



## PROGRAM MANAGEMENT

**Staff Resources:** In addition to leadership support, having adequate program management structures and staffing resources will be critical for the successful implementation of the sustainability plan and on-going administration of the sustainability program. All District staff have a role to play in supporting and advancing sustainability efforts, but the program will also need dedicated staff to provide program direction and coordination. While the District currently has a contract Sustainability Coordinator, a full-time District Sustainability Manager position should be created to spearhead this initiative. The Sustainability Manager should be charged with working with all departments and stakeholders across the District to implement sustainability initiatives and drive continual improvement. The Sustainability Manager should also have formal ties to the Educational Services department in order to advise on the integration of sustainability content into the curriculum. The creation of a part-time Environmental Education Coordinator position will be critical to formalizing the integration of sustainability into the curriculum and working with the Sustainability Manager to advance the District's environmental education program. Additionally, it is recommended that the District create full-time Facilities Technician, Landscaping Supervisor, and Irrigation Specialist positions focused on sustainability to provide on-the-ground support for relevant facilities issues, such as water leaks and waste management issues. The M&O Department cannot adequately support these additional tasks with their existing staff, so these positions will be critical to ensuring these issues are addressed in a timely manner. Funding should also be allocated for a part-time Sustainability Intern to support the Sustainability Manager with program management. The District should promote this opportunity to local college and university students. Sample job descriptions for the proposed new sustainability staff positions can be found in the appendix.

To provide additional structure for the sustainability program, the District should establish a formal Sustainability Department to serve as the primary home of sustainability in the District. The Sustainability Department should have a dedicated annual budget inclusive of staffing costs and discretionary funds to support school events and sustainability related programs, or to supply mini-grants for student and staff-proposed sustainability initiatives. This departmental budget should augment rather than replace the existing resources being used for sustainability and will be used to ensure consistency in programming Districtwide. Creating internal sustainability staff positions and a sustainability department will not only ensure continuity and resources for this program, but it will formally establish authority for the sustainability program.

Funding for the Sustainability Department budget can be allocated from the General Funds and/or cost savings resulting from the implementation of energy and water reduction strategies through the Green Revolving Fund (see below).

### Proposed Sustainability Department Budget:

BUDGET ITEM	PROPOSED ANNUAL BUDGET
Staff Salaries	
Sustainability Manager (FT)	\$75,000 - \$85,000
Facilities Technician (FT)	\$50,000 - \$60,000
Landscape Supervisor (FT)	\$59,000 - \$72,000
Irrigation Specialist (FT)	\$40,000 - \$55,000
Environmental Education Coordinator (PT)	\$14,000 - \$24,000 or hourly
Sustainability Intern (PT)	\$5,000
Sustainability Discretionary Fund Allocate \$2,000 per school	\$32,000
<b>Total</b>	<b>\$275,000 - \$333,000</b>

**Sustainability Steering Committee:** The District's Sustainability Steering Committee represents another key element of the sustainability program management strategy. The Committee was established in May 2018 to advise on the development of the Sustainability Plan and is composed of 8-12 members representing the District's key stakeholder groups:

1. Sustainability Staff
2. Maintenance and Operations
3. Educational Services
4. Teachers
5. Food Services
6. Administration of an Elementary School
7. Administration of a High School
8. PTA
9. City of Malibu
10. City of Santa Monica
11. Financial Oversight Committee

This committee should be re-convened and charged by the Board of Education to advise on the District's sustainability program moving forward. The Sustainability Committee will be responsible for supporting the development and implementation of the sustainability programs and projects described in this plan, monitoring the impacts of sustainability efforts over time, developing additional goals and metrics to measure progress, and engaging with the District community to build support for the sustainability program. The committee composition should be re-evaluated prior to being officially charged to ensure it is reflective of the District community. Students make up the largest proportion of the District's population. As such, their involvement in the District's sustainability efforts and inclusion on the sustainability committee will be critical to the success of the sustainability program. District staff should be compensated for their involvement on the committee, in accordance with standard practice for other District committees.

**Funding Mechanisms:** Recognizing that the implementation of the Sustainability Plan will require time and money, the District will identify funding mechanisms to ensure that adequate financial resources are available to support the program. Possible funding sources include operational budgets (general fund), capital improvement funds (bond funds), grant allocations, rebates, state program funds, reinvested utility savings, private partnerships, and other funding sources to be identified by the District. Potential funding sources for specific focus areas and strategies are identified in each section of this plan. External funding sources will be prioritized for use when available to minimize the District's out of pocket costs.



As sustainability initiatives are implemented and yield cost savings, the District has an opportunity to reinvest these cost savings in the sustainability program through a Green Revolving Fund. It is recommended that the District establish a Green Revolving Fund as part of implementation as a mechanism for tracking and capturing the cost savings resulting from the implementation of sustainability initiatives that offer a return on investment. By capturing those savings and earmarking them for sustainability, the District will create a regenerating funding source that can be used to support new projects/programs that will yield additional savings. A green fund can also be used to offset incremental cost increases for sustainability "upgrades" for existing projects and can support staffing resources. Green revolving funds represent a best practice funding mechanism for sustainability programs.

While it was not possible to estimate the complete implementation costs for all of the recommended strategies included in this plan, the District will undertake cost estimating exercises for all strategies as part of the implementation process. The costs associated with strategy implementation will include staff time, professional services, materials, and construction. Prior to implementing each initiative, the District will work with service providers and internal staff to determine all associated costs. As an important consideration determining feasibility, project costs may be used to re-prioritize strategies for implementation.

Looking to the future, the District should identify opportunities to integrate sustainability program needs into bond measures.

## MONITORING + REPORTING

Monitoring and reporting on the impacts and progress of the Sustainability Plan will allow the District to drive continual improvement, identify and celebrate success, and strategically manage the sustainability program direction. The District will develop an annual Sustainability Report in order to report out on the sustainability performance indicators and progress towards goal achievement from each fiscal year. The report will also highlight program success stories and communicate intentions for the upcoming year. The annual report will be presented to the Board of Education and will be publicized to the District community to ensure transparency and accountability. Annual reporting is essential for evaluating the cumulative effects of the Sustainability Plan and will play a role in informing future updates.

In addition to annual reporting, the District will undertake periodic and on-going monitoring activities to track performance and trends in key focus areas. The District has existing protocols and tools for tracking electricity, natural gas, solar production, and water consumption, through the Energy Star Portfolio Manager tool, WaterSmart software, the District's monthly energy report, and the energy dashboard. The results of these monitoring activities are shared with District stakeholder groups to drive behavior change and encourage participation in sustainability activities. The District will continue these monitoring activities and identify additional monitoring and reporting tools, such as the Green Schools Alliance Prostar tool. Once the District signs the Green Schools Alliance Leadership Commitment, annual participation in the Sustainability Tracking and Roadmap Tool (START) will also be expected. This will provide the District with an additional tool for reporting and communicating progress on its sustainability commitment. Once the District has established a GHG inventory, periodic monitoring and reporting of the District's climate impacts will be added to the reporting protocol.



## COMMUNICATIONS

An effective communications strategy will be critical for driving engagement and developing buy-in for the Sustainability Plan across all levels of the District. As such, the District will develop a communications plan to accompany the Sustainability Plan implementation process. Internally, the District must conduct outreach to its various stakeholder groups, such as school principals, students, teachers, parents, PTA, and staff members, in order to communicate the Sustainability Plan vision, goals, and strategies. This process will be critical to ensuring that responsible parties are informed about new expectations and that there is clear, top-down direction.

The District will identify the appropriate communications channels for communicating with these various stakeholder groups at both the District level and the individual school site level and will determine the correct frequency for on-going messaging. It is recommended that the District make use of existing, recognized communications channels, rather than relying on sustainability-specific communications channels. While the sustainability program social media accounts will be valuable tools for communicating with internal champions, the District's general communications channels will reach a broader audience and help to institutionalize the sustainability message as a core value of the District. Examples of existing communication channels that should be used for internal messaging on sustainability goals, accomplishments, and programming include:

- **“Monday Message” to all parents**
- **Principal Weekly Memos**
- **PTA Council Meetings/Communications**
- **School PTA Meetings/Communications**
- **SMMUSD Communications Department**
- **New Staff Orientation and Trainings**

In addition to communicating internally with District stakeholders, the District will develop communication methods for sharing updates and accomplishments related to the sustainability program externally. The communications plan will play an important accountability role for the District community by reporting out on the impacts of the Sustainability Plan and progress towards achieving its goals. The District will establish communication protocols to accompany the various monitoring and reporting activities in order to ensure transparency and accountability. As the program matures, the District should identify additional opportunities to share the sustainability program successes and lessons learned with K-12 school districts nationwide, in line with its commitment to leadership and climate action.

## FUTURE UPDATES

While District's sustainability commitments have been established through 2030, this plan will be a living document and will be updated as needed to reflect program progress, realign future direction with evolving program goals and needs, re-prioritize efforts, and identify next steps. The annual monitoring and reporting process will not only reveal the District's progress towards achieving its goals, it will also identify opportunities to update the Sustainability Plan. As the District implements strategies and achieves short-term goals, it may need to update the plan to include new/revised goals, strategies, partnership opportunities, resources, and additional areas of focus beyond the plan's existing focus areas.

At a minimum, the recommended strategies will be reviewed each year as part of the annual reporting process and the goals will be evaluated every five years, beginning in 2020. The District's Sustainability Steering Committee will be engaged to advise on all plan revisions.

## RECOMMENDED STRATEGIES

RECOMMENDED STRATEGIES	RESOURCES NEEDED
<b>Leadership</b>	
Formally adopt the Sustainability Plan and charge the identified District stakeholders with implementation.	No Additional Funding Needed
Sign the Green Schools Alliance Sustainability Leadership Commitment.	No Additional Funding Needed
Join the Green Schools Alliance District Collaborative.	Funding Needed: Staff Time
<b>Program Management</b>	
Create a full-time District Sustainability Manager position with the authority to work across the District to implement and oversee sustainability initiatives.	Funding Needed: General Fund
Create full-time Facilities Technician, Landscaping Supervisor, and Irrigation Specialist positions focused on sustainability related facilities issues.	Funding Needed: General Fund
Establish a formal Sustainability Department with a dedicated budget.	Funding Needed: General Fund
Create a part-time Environmental Education Coordinator position focused on integrating sustainability and environmental education into the curriculum.	Funding Needed: General Fund
Re-establish and charge the Districtwide Sustainability Steering Committee with providing input and oversight of the District's sustainability program.	Funding Needed: General Fund
Recruit students to participate on the Sustainability Steering Committee.	Funding Needed: Staff Time
Establish a Green Revolving Fund to capture savings resulting from the implementation of sustainability measures.	Funding Needed: Staff Time
<b>Monitoring + Reporting</b>	
Develop an annual Sustainability Report to be released each fiscal year.	Funding Needed: Staff Time
Continue on-going monitoring activities that track and communicate the District's performance and trends in key focus areas.	Funding Needed: General Fund
Evaluate monitoring and reporting tools to support data tracking and the annual reporting process.	Funding Needed: Staff Time
<b>Communications</b>	
Develop an internal sustainability communications plan that identifies communication channels and frequencies for communicating with the District's key stakeholder groups.	Funding Needed: Staff Time
Develop an external sustainability communications plan in conjunction with the monitoring & reporting process to report out on the sustainability program metrics, accomplishments, and goals.	Funding Needed: Staff Time
<b>Future Updates</b>	
Review the Sustainability Plan strategies once annually and revisit the goals a minimum of once every five years, beginning in 2020.	Funding Needed: Staff Time

# APPENDIX

# APPENDIX

## KEY PERFORMANCE INDICATORS TABLE

SUSTAINABILITY FOCUS AREA	PERFORMANCE INDICATORS
Climate	<ul style="list-style-type: none"> <li>• <b>Greenhouse Gas Emissions</b> Tons of CO<sub>2</sub> equivalent emissions produced annually.</li> </ul>
Education + Engagement	<ul style="list-style-type: none"> <li>• <b>Sustainability in the Curriculum</b> The percentage of courses that include sustainability course work and/or learning outcomes.</li> <li>• <b>Sustainability Literacy</b> Specific metrics to be developed by 2025.</li> <li>• <b>Engagement Events</b> The number of sustainability education and engagement events hosted annually by the District.</li> <li>• <b>Professional Development for Teachers</b> The percentage of teachers receiving training to support the teaching of sustainability curriculum.</li> </ul>
Energy Efficiency + Renewables	<ul style="list-style-type: none"> <li>• <b>Electrical Consumption</b> Total kilowatt-hours of electricity consumed annually.</li> <li>• <b>Natural Gas Consumption</b> Total therms of natural gas consumed annually.</li> <li>• <b>Energy Use Intensity</b> Combined electricity and natural gas consumed in kBtu per square foot.</li> <li>• <b>Onsite Solar Production</b> Kilowatt-hours of electricity supplied annually by solar.</li> <li>• <b>Percent Onsite Solar Production</b> Percent of total District electrical consumption supplied by onsite solar.</li> </ul>
Water	<ul style="list-style-type: none"> <li>• <b>Water Used</b> Total gallons of water consumed annually.</li> </ul>
Solid Waste	<ul style="list-style-type: none"> <li>• <b>Total Waste Generation</b> Tons of Municipal Solid Waste (MSW) generated</li> <li>• <b>Diversification from Landfill</b> Percent of Municipal Solid Waste diverted from landfill.</li> <li>• <b>E-Waste Recycling</b> Percent of e-waste recycled.</li> <li>• <b>Construction &amp; Demolition Recycling</b> Percent of C&amp;D waste recycled per project.</li> </ul>
Transportation	<ul style="list-style-type: none"> <li>• <b>Fleet GHG Emissions</b> Greenhouse gas emissions resulting from the operation of the District's fleet vehicles.</li> <li>• <b>Drive Alone Rate</b> Percent of District employee commuters arriving in a single occupancy vehicle.</li> <li>• <b>Staff Average Vehicle Ridership (AVR)</b> The ratio of District employees to vehicles arriving at the work site.</li> <li>• <b>Student Average Vehicle Ridership (AVR)</b> The ratio of District students to vehicles arriving at school.</li> </ul>
Food, Nutrition + Wellness	<ul style="list-style-type: none"> <li>• <b>Locally Sourced Produce</b> Percentage of food products grown or raised within 250 miles of the District.</li> <li>• <b>Good Food Purchasing Program Goals</b> Specific metrics to be developed in 2020.</li> <li>• <b>Health Education</b> Percentage of students receiving formal health and nutrition education.</li> </ul>
Green Building + Operations	<ul style="list-style-type: none"> <li>• <b>Green Building Certifications</b> Percentage of qualifying projects that achieve the District's CHPS goals for 2020, 2025, and 2030.</li> <li>• <b>Sustainable Purchasing</b> Specific metrics to be developed by 2020.</li> </ul>

## 2017-18 BASELINE INVENTORY

ELECTRICITY CONSUMPTION BY SOURCE FY17-18 BASELINE					
District Site	Purchased Electricity (kWh)	On-Site Solar Production (kWh)	Total Electrical Consumption (kWh)	Square Feet (ft <sup>2</sup> )	kWh/ft <sup>2</sup>
District Office	484,703	0	484,703	31,027	15.62
Edison Language Academy	436,256	0	436,256	72,597	6.01
Franklin Elementary School	109,178	180,131	289,309	70,432	4.11
Grant Elementary School	96,432	172,635	269,067	60,234	4.47
John Adams Middle School	536,225	0	536,225	130,093	4.12
John Muir Elementary School/SMASH	253,634	11,855	265,488	50,995	5.21
Juan Cabrillo Elementary School	31,471	119,294	150,765	39,773	3.79
Lincoln Middle School	770,343	0	770,343	163,828	4.70
Malibu Middle/High School	900,942	0	900,942	182,079	4.95
McKinley Elementary School	236,464	46,839	283,303	63,171	4.48
Olympic High School	117,117	0	117,117	39,333	2.98
Point Dume Marine Science	49,909	135,721	185,630	31,782	5.84
Roosevelt Elementary School	41,866	231,206	273,072	58,921	4.63
Santa Monica High School	3,763,973	0	3,763,973	491,290	7.66
Transportation Center	41,567	0	41,567	6,155	6.75
Washington West Preschool	93,243	0	93,243	37,999	2.45
Webster Elementary School	42,854	125,768	168,622	36,384	4.63
Will Rogers Learning Community	105,751	156,262	262,013	53,157	4.93
<b>DISTRICT TOTAL</b>	<b>8,111,927</b>	<b>1,179,710</b>	<b>9,291,636</b>	<b>1,619,250</b>	<b>5.74</b>

## 2017-18 BASELINE INVENTORY

SOLAR PRODUCTION FY17-18 BASELINE			
District Site	On-Site Solar Production (kWh)	Total Electrical Consumption (kWh)	% Solar
District Office	0	484,703	0%
Edison Language Academy	0	436,256	0%
Franklin Elementary School	180,131	289,309	62%
Grant Elementary School	172,635	269,067	64%
John Adams Middle School	0	536,225	0%
John Muir Elementary School/SMASH	11,855	265,488	4%
Juan Cabrillo Elementary School	119,294	150,765	79%
Lincoln Middle School	0	770,343	0%
Malibu Middle/High School	0	900,942	0%
McKinley Elementary School	46,839	283,303	17%
Olympic High School	0	117,117	0%
Point Dume Marine Science	135,721	185,630	73%
Roosevelt Elementary School	231,206	273,072	85%
Santa Monica High School	0	3,763,973	0%
Transportation Center	0	41,567	0%
Washington West Preschool	0	93,243	0%
Webster Elementary School	125,768	168,622	75%
Will Rogers Learning Community	156,262	262,013	60%
<b>DISTRICT TOTAL</b>	<b>1,179,710</b>	<b>9,291,636</b>	<b>13%</b>

## 2017-18 BASELINE INVENTORY

NATURAL GAS CONSUMPTION FY17-18 BASELINE			
District Site	Natural Gas Consumption (Therms)	Square Feet (ft <sup>2</sup> )	Therms/ft <sup>2</sup>
District Office	258	31,027	0.01
Edison Language Academy	8,872	72,597	0.12
Franklin Elementary School	3,728	70,432	0.05
Grant Elementary School	3,486	60,234	0.06
John Adams Middle School	9,843	130,093	0.08
John Muir Elementary School/SMASH	1,626	50,995	0.03
Juan Cabrillo Elementary School	49,410	39,773	1.24
Lincoln Middle School	29,020	163,828	0.18
Malibu Middle/High School	47,857	182,079	0.26
McKinley Elementary School	2,554	63,171	0.04
Olympic High School	3,385	39,333	0.09
Point Dume Marine Science	1,812	31,782	0.06
Roosevelt Elementary School	3,135	58,921	0.05
Santa Monica High School	69,380	491,290	0.14
Transportation Center	84	6,155	0.01
Washington West Preschool	1,542	37,999	0.04
Webster Elementary School	2,694	36,384	0.07
Will Rogers Learning Community	5,370	53,157	0.10
<b>DISTRICT TOTAL</b>	<b>244,056</b>	<b>1,619,250</b>	<b>0.15</b>

## 2017-18 BASELINE INVENTORY

TOTAL ENERGY CONSUMPTION FY17-18 BASELINE				
District Site	Total Electrical Consumption (kWh)	Natural Gas Consumption (Therms)	Square Feet (ft <sup>2</sup> )	Energy Use Index (kBtu/ft <sup>2</sup> )
District Office	484,703	258	31,027	53.31
Edison Language Academy	436,256	8,872	72,597	20.63
Franklin Elementary School	289,309	3,728	70,432	14.07
Grant Elementary School	269,067	3,486	60,234	15.30
John Adams Middle School	536,225	9,843	130,093	14.14
John Muir Elementary School/SMASH	265,488	1,626	50,995	17.80
Juan Cabrillo Elementary School	150,765	49,410	39,773	14.18
Lincoln Middle School	770,343	29,020	163,828	16.22
Malibu Middle/High School	900,942	47,857	182,079	17.15
McKinley Elementary School	283,303	2,554	63,171	15.34
Olympic High School	117,117	3,385	39,333	10.25
Point Dume Marine Science	185,630	1,812	31,782	19.99
Roosevelt Elementary School	273,072	3,135	58,921	15.87
Santa Monica High School	3,763,973	69,380	491,290	26.28
Transportation Center	41,567	84	6,155	23.06
Washington West Preschool	93,243	1,542	37,999	8.41
Webster Elementary School	168,622	2,694	36,384	15.89
Will Rogers Learning Community	262,013	5,370	53,157	16.92
<b>TOTAL</b>	<b>9,291,636</b>	<b>244,056</b>	<b>1,619,250</b>	<b>19.73</b>

## 2017-18 BASELINE INVENTORY

WATER CONSUMPTION FY17-18 BASELINE					
District Site	Annual Water Usage (HCF)	Annual Water Usage (Gallons)	Square Feet (ft <sup>2</sup> )	HCF/ft <sup>2</sup>	Gallons/ft <sup>2</sup>
District Office		-	31,027	0.00	0.00
Edison Language Academy	3,424.62	2,561,616	72,597	0.05	35.29
Franklin Elementary School	2,955.52	2,210,726	70,432	0.04	31.39
Grant Elementary School	2,694.89	2,015,778	60,234	0.04	33.47
John Adams Middle School	3,798.58	2,841,335	130,093	0.03	21.84
John Muir Elementary School/ SMASH	1,030.71	770,969	50,995	0.02	15.12
Juan Cabrillo Elementary School	2,142.00	1,602,216	39,773	0.05	40.28
Lincoln Middle School	4,681.61	3,501,845	163,828	0.03	21.38
Malibu Middle/High School	19,233.00	14,386,284	182,079	0.11	79.01
McKinley Elementary School	2,924.34	2,187,407	63,171	0.05	34.63
Olympic High School	1,176.13	879,745	39,333	0.03	22.37
Point Dume Marine Science	2,825.00	2,113,100	31,782	0.09	66.49
Roosevelt Elementary School	2,666.81	1,994,772	58,921	0.05	33.86
Santa Monica High School	8,718.89	6,521,728	491,290	0.02	13.27
Transportation Center	135.76	101,547	6,155	0.02	16.50
Washington West Preschool	907.78	679,017	37,999	0.02	17.87
Webster Elementary School	2,494.00	1,865,512	36,384	0.07	51.27
Will Rogers Learning Community	2,890.69	2,162,240	53,157	0.05	40.68
<b>TOTAL</b>	<b>64,700.32</b>	<b>48,395,836</b>	<b>1,619,250</b>	<b>0.04</b>	<b>29.89</b>

## 2017-18 BASELINE INVENTORY

SOLID WASTE GENERATION AND DIVERSION FY17-18 BASELINE							
District Site	Landfill Waste (lbs)	Recycling (lbs)	Green Waste (lbs)	Total Waste (lbs)	Square Feet (ft <sup>2</sup> )	lbs/ft <sup>2</sup>	Diversion Rate
District Office	-	57,364	-	57,364	31,027	1.85	100.00%
Edison Language Academy	169,403	25,097	9,820	204,320	72,597	2.81	17.09%
Franklin Elementary School	169,403	50,193	9,820	229,416	70,432	3.26	26.16%
Grant Elementary School	169,403	50,193	9,820	229,416	60,234	3.81	26.16%
John Adams Middle School	225,870	50,193	19,641	295,704	130,093	2.27	23.62%
John Muir Elementary School/SMASH	124,229	25,097	-	149,325	50,995	2.93	16.81%
Juan Cabrillo Elementary School	112,935	25,097	9,820	147,852	39,773	3.72	23.62%
Lincoln Middle School	282,338	50,193	19,641	352,172	163,828	2.15	19.83%
Malibu Middle/High School	338,805	75,290	19,641	433,736	182,079	2.38	21.89%
McKinley Elementary School	169,403	50,193	9,820	229,416	63,171	3.63	26.16%
Olympic High School	169,403	50,193	9,820	229,416	39,333	5.83	26.16%
Point Dume Marine Science	112,935	25,097	9,820	147,852	31,782	4.65	23.62%
Roosevelt Elementary School	169,403	50,193	9,820	229,416	58,921	3.89	26.16%
Santa Monica High School	589,521	110,903	21,698	722,123	491,290	1.47	18.36%
Transportation Center	64,534	28,682	-	93,216	6,155	15.14	30.77%
Washington West Preschool and FIP	56,468	25,097	9,820	91,385	37,999	2.40	38.21%
Webster Elementary School	112,935	25,097	9,820	147,852	36,384	4.06	23.62%
Will Rogers Learning Community	169,403	25,097	9,820	204,320	53,157	3.84	17.09%
<b>TOTAL</b>	<b>3,206,388</b>	<b>799,270</b>	<b>188,646</b>	<b>4,194,303</b>	<b>1,619,250</b>	<b>2.59</b>	<b>23.55%</b>

## 2017-18 BASELINE INVENTORY

EMPLOYEE COMMUTING FY17-18 BASELINE								
District Site	AM Peak				PM Peak			
	Response Rate	Total Employees	Number of Vehicles	AM Peak AVR	Response Rate	Total Employees	Number of Vehicles	PM Peak AVR
District Office	91%	120	100.84	1.190	91%	103	83.74	1.230
Edison Language Academy	45%	49	44.14	1.110	54%	37	32.17	1.150
Franklin Elementary School	39%	80	72.73	1.100	38%	65	58.04	1.120
Geraldine P. Woods Preschool	33%	3	3.00	1.000	0%	0	-	1.000
Grant Elementary School	47%	73	65.77	1.110	42%	59	55.14	1.070
John Adams Middle School	58%	91	73.98	1.230	64%	84	66.67	1.260
John Muir Elementary School/ SMASH	51%	74	65.49	1.130	43%	65	58.56	1.110
Juan Cabrillo Elementary School	34%	32	30.19	1.060	30%	30	28.30	1.060
Lincoln Middle School	44%	99	86.09	1.150	50%	88	75.86	1.160
Malibu Middle/High School	57%	98	85.22	1.150	59%	95	84.82	1.120
McKinley Elementary School	37%	76	67.26	1.130	43%	61	53.51	1.140
Olympic High School	100%	23	20.18	1.140	100%	16	14.04	1.140
Point Dume Marine Science	38%	24	22.43	1.070	33%	18	17.31	1.040
Roosevelt Elementary School	30%	81	73.64	1.100	33%	64	58.72	1.090
Santa Monica High School	58%	244	206.78	1.180	59%	221	185.71	1.190
Transportation Center	68%	25	20.49	1.220	72%	25	20.66	1.210
Washington West/South Preschool, CDS, and FIP	100%	26	20.47	1.270	100%	26	20.47	1.270
Webster Elementary School	37%	35	33.33	1.050	39%	28	27.45	1.020
Will Rogers Learning Community	51%	67	55.37	1.210	61%	51	40.80	1.250
<b>AVERAGE</b>		<b>1320</b>		<b>1.137</b>		<b>1136</b>		<b>1.138</b>

## **SAMPLE JOB DESCRIPTIONS - PROPOSED SUSTAINABILITY STAFF POSITIONS**

---

\*Salary range based on qualifications, experience and education

### **Sustainability Manager- Full-time-Salary Range \$ 75,000-85,000.**

- Lead and oversee the execution of the long-term Sustainability Plan, its goals and operating principles and lead the development of high-level strategy to support it.
- Develop strategies, policies, projects, trainings and organizational changes needed to advance sustainability initiatives as presented in the Sustainability Plan.
- Monitor, track, and report all sustainability initiatives including quarterly reporting of water, waste and energy usage
- Collaborate with all Districts departments to execute the Sustainability Plan and build sustainability principles into short and long-range operations and budgeting planning.
  - Ensure student learning, education and training is a focus in all sustainability efforts
  - Responsible for publishing and presenting progress of sustainability plan and related projects and ensure timeline is being followed and goals are being met.
  - Collaborate with the City of Santa Monica, City of Malibu and outside agencies to ensure goal alignment.
- Form and lead the Districts Sustainability Plan oversight committee.
- Manage the sustainability budget and sustainability project funds
- Facilitate internal and external communications and visibility of the progress of the Sustainability Goals and to promote awareness.

### **Sustainability Facility Technician -Full time-Salary Range \$50,000-60,000**

- Supports and reports to the Sustainability Manager in all district sustainability projects
- Coordinates all site visits, audits, projects, construction related to sustainability projects such as energy, solar, water, waste, transportation and school gardens
- Travels to each site to monitor waste, water, energy and transportation and all sustainability projects
- Serves as the site liaison for all sustainability project development
- Works closely with M+O department and FIP department
- Serves as the onsite project development coordinator with outside vendors

### **Environmental Education Coordinator Part time- either hourly/special assignment \$14,000-24,000 or hourly**

- Leads environmental education curriculum development as presented in the Sustainability Plan
- Serves as liaison between the Educational Services department and Sustainability Department to ensure sustainability efforts are included in Educational curriculum
- Creates and implements educational programs to provide to teachers and school staff
- Expert in Next Generation Science Standards
- Creates and updates educational resources, classroom activities and projects made available to all teachers to incorporate sustainability into the classroom

