



Kate Harrison  
Councilmember District 4

CONSENT CALENDAR  
November 13, 2018

To: Honorable Mayor and Members of the City Council  
From: Councilmembers Harrison, Hahn, and Davila  
Subject: Resolution in Support of the Berkeley Unified School District Sustainability Plan

RECOMMENDATION

Adopt a Resolution in support of the Berkeley Unified School District Sustainability Plan and urge the Berkeley School Board to adopt the Plan at the November 14<sup>th</sup> School Board meeting.

BACKGROUND

On November 14<sup>th</sup>, 2018, the Berkeley School Board will vote on an impressive and comprehensive Sustainability Plan. The Sustainability Plan outlines changes to the school district’s infrastructure, lesson plans, and culture that will green our schools and provide environmental education to all Berkeley students.

The Sustainability Plan calls for green infrastructure throughout our school district, including but not limited to solar and LED lighting, bioswales and rain gardens and electric school buses. It also recommends more environmental education through energy science lessons, field trips, and at least one outdoor environmental science classroom per school. All changes outlined are intended to conserve energy, provide healthier learning environments, and provide comprehensive environmental education to all students, as students from lower incomes are often restricted in their abilities to participate in field trips and nature-based learning.

The City of Berkeley declared a climate emergency in 2018, passed a Climate Action Plan in 2009, and passed a Resiliency Plan in 2015. The City is working to combat climate change and green infrastructure of City facilities, and we must ensure that all governing bodies in Berkeley do the same.

FINANCIAL IMPLICATIONS

None.

ENVIRONMENTAL SUSTAINABILITY

Consistent with the City’s climate and environmental goals.

CONTACT PERSON

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[Title of Report]

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**Attachments:**

1: Resolution

2: BUSD Sustainability Plan

RESOLUTION NO. ##,###-N.S.

RESOLUTION IN SUPPORT OF BERKELEY UNIFIED SCHOOL DISTRICT  
SUSTAINABILITY AND RESILIENCY PLAN

WHEREAS, the City of Berkeley applauds the District's many environmental programs, including its world-class gardening programs, efforts to install solar panels and energy efficient lighting, and commitment to alternative transportation; and

WHEREAS, in the face of the federal administration's assault on science and environmental policies, and emerging needs for building more resilience as a community, Berkeley has a responsibility to fight climate change on a local level; and

WHEREAS, environmental education programs provide numerous opportunities for hands-on learning, linked learning, community service and other best practices in education; and

WHEREAS, the Sustainability Plan will detail opportunities for outdoor and environmental education for all students, including linking green facilities to lesson plans that support schools as learning labs for students; and

WHEREAS, students from lower-income families do not often get the opportunity to participate in field trips or nature-based learning, and lower-income families and neighborhoods are also often the first communities affected by climate change and pollution; and

WHEREAS, climate change is one of the greatest challenges humanity has ever faced, and the BUSD Sustainability Plan offers a comprehensive road map to implement environmental solutions; and

WHEREAS, both the District and City of Berkeley have already zero waste resolutions and policies committing to zero waste programs and practices; and

WHEREAS, the City of Berkeley has declared already Climate Emergency in 2018, passed a Climate Action Plan in 2009 and a Resiliency Plan in 2015;

THEREFORE LET IT BE RESOLVED, That the City of Berkeley supports the Berkeley Unified School District's Sustainability and Resiliency Plan, as presented to the School Board on September 26, 2018, and will support this plan on an as-needed basis, including discussions at the quarterly 2 x 2 meetings between the School District and City of Berkeley.

PLEASE REPLACE WITH ATTACHED DOCUMENT.

## A Deeper Shade of Green BUSD Sustainability Plan

### General Summary

This proposal offers a comprehensive plan for the Berkeley Unified School District to reduce the environmental footprint of schools and promote environmental literacy, which we believe are fundamental to a high-quality 21st century education. We applaud the District's world-class gardening programs, its efforts to install solar panels and energy efficient lighting, and commitment to promoting alternative transportation as role models for other school districts. In the face of the climate change crisis, the federal administration's assault on science and environmental policies, and emerging needs for building more resilience as a community, there is so much more that Berkeley schools can and should do.

**We must ensure that all Berkeley students have access to healthy, green school buildings and grounds and hands-on environmental and outdoor education.**

### General Goals:

- **Save money:** Cost savings from energy conservation programs alone could result in cost savings of tens (even hundreds) of thousands of dollars.
- **Support Next Generation Science Standards and Best Practices in Educational Learning:** Environmental education programs provide numerous opportunities for hands-on learning, linked learning, community service and other best practices in education. Students from lower-income families do not often get the opportunity to participate in field trips or nature-based learning. The Sustainability Plan will detail opportunities for outdoor and environmental education for ALL students, including linking green facilities to lesson plans that support schools as learning labs for students.
- **Reduce greenhouse gas emissions, the District's environmental footprint; while supporting its commitment to social justice:** Climate change is one of the greatest challenges humanity has ever faced. It's time for BUSD to show its commitment to implementing environmental solutions. Lower-income families and neighborhoods are also often the first communities affected by climate change and pollution. By addressing climate change and developing resiliency plans, the Plan also supports the District's commitment to equity and social/environmental justice.
- **Promote the health, social & emotional learning of students:** Green policies decrease rates of asthma, provide healthier learning environments for teachers and students alike, and support physical activities such as walking, biking and hiking.

### Curriculum-Focused General Programs:

#### Communication:

- District-wide online communication
- Central website

#### Green Classroom Program:

- Checklist of what makes a Green Classroom, with awards and incentives for participants

#### Sustainable Schools Program:

- For committed schools, prioritize activities with them, in first phases.

#### Professional Development:

- Integration of eco-literacy into various topics
- Specific topic-related PD: waste, water, etc.

#### Teacher Leaders (pending funding)

- Help to disseminate resources
- Go to PD opportunities.

## **Plan Activities**

### **Waste**

#### **Facilities:**

- Buy and distribute infrastructure (classroom bins, signage, etc.)
- Custodian Training Sessions
- Roll out reusable cutlery & low-waste snacks in after school programs

#### **Culture & Implementation:**

- District-wide messaging, including signage
- Agreement about mandatory 4-bin sorting in ALL buildings and meetings
- Zero Waste Challenge
- Parent education workshops (PTA meetings)

#### **Teaching & Learning (teachers):**

- Mini-lesson plan about sorting and the 4 R's
- Teacher liaison; stipend to attend fall meeting and support dissemination of resources, in collaboration with Sustainability Plan staff
- Encouragement to participate in Zero Waste Challenge (audit + encouragement)

### **Water**

#### **Facilities:**

- Do water assessments, including water safety.
- Sheet mulch lawns, as agreed upon by schools.
- Plan and implement green infrastructure projects, including rain water catchment, bioswales and rain gardens.

#### **Culture & Implementation**

- Water Wise Challenge as part of Conservation Challenge

#### **Teaching & Learning:**

- Kids for the Bay supports 3rd graders learning about watersheds and protecting nearby creeks.
- Create a scope and sequence curriculum that includes water conservation education field trips

### **Transportation**

#### **Infrastructure and Operations**

- Collaborate with City of Berkeley to prioritize bike racks & Safe Routes to Schools projects near schools
- Continue to purchase electric school buses and install needed infrastructure

#### **Culture and Implementation**

- Integrate Active Transportation into the Wellness Policy, and promote Safe Routes to Schools District-wide
- Audit schools for active transportation infrastructure and education

#### **Teaching and Learning**

- Bike riding lessons in p.e. Classes (through Safe Routes)
- After school classes: Bike Repair Class

## **Nature-based Learning**

### **Teaching and Learning**

- Encourage nature-based field trips, including funding opportunities and digital stories about field trips
- Share stories from at least three schools about the value of their nature-based field trips.
- Pilot test PD for integration of environmental topics into curriculum
- PD in the Summer: NGSS in the Outdoors Workshop

### **Culture and Implementation**

- Promote/find funding opportunities for nature-based field trips
- Co-host PD with nature-based education as one focus

## **Green schoolyards**

### **Infrastructure and Operations**

- Disperse pollinator gardens & other green infrastructure around campus, as teaching tools
- Build at least one outdoor classroom per school.

### **Teaching and Learning**

- Work with schools on a Design Charrette that integrates more greening into existing site plans.
- Organize after school classes that teachers about sustainability and natural building

## **Green Buildings & Indoor Air Quality**

### **Infrastructure and Operations**

- Pass a policy to mandate green cleaning products.
- Develop a green building materials and indoor air quality policy for new construction and remodeling, Work with Bond Measure Committee to ensure that this policy is integrated into the bond measure as added costs.

### **Teaching and Learning**

- Collaborate with Center for Green Schools to match local mentors with selected schools

### **Culture and Implementation**

- Review with staff and teachers health and cognition impacts of poor Indoor air quality including VOCs, semi VOCs, synthetic fragrances, particulates, phthalates and elevated CO2 levels. Discuss common sources of pollutants.
- Work in selected schools to assess CO2 levels

## **ENERGY**

### **Infrastructure and Operations**

- Install solar and LED lighting on all feasible sites, using 2020 bond measure.
- Start tracking energy usage through ARC platform (summer 2018). Continue to update lighting to LED.
- Conduct feasibility study to look at replacing all gas appliances with electric ones

### **Teaching and Learning**

- Do energy audits with USGBC Mentors at 3 or more schools
  - Use ARC platform to monitor energy
- Get “solar suitcase” kits from [PG&E](#), if science teachers haven’t already gotten them.
- Work with District Administration and Science Coordinators to include key lessons about Sustainable Energy (and Water) district wide at various grade levels.

### **Culture and Implementation**

- Organize Turn It Off Campaign with school sites (Jan.-June 2018).
  - 1/3 of savings: school sites; 1/3 of savings: Sustainability Plan; 1/3 of savings: General Fund.

- Support science teachers in teaching at least one energy lesson after beginning the campaign

## **FOOD**

### **Infrastructure and Operations**

- Assess how much food is organic, and where it's coming from.

### **Teaching and Learning**

- Work with local farms to support them in providing affordable field trips.
- Encourage teachers to purchase their own garden boxes for their classrooms, with identified funding
- Encourage internships and service learning opportunities with local farms and gardens,

### **Culture and Implementation**

- Pass the Good Purchasing Food Policy
- Promote BUSD's cooking from scratch policies.
- Promote existing gardening/cooking program
- Update the Wellness policy (to also include Safe Routes to Schools).

## **Eco-Literacy and Climate Change Education**

### **Our Vision**

To equip all students with the knowledge, skills, and experiences to act individually and collectively to bring forward an environmentally sustainable, socially just, and economically thriving existence.

### **Designed to be:**

- Interdisciplinary
- Inspirational and transformational
- Clear and usable
- Measurable and Assessable

### **Examples of Eco-Literacy:**

#### **Waste Lesson Plans:**

Learning goal #3: Applying science content knowledge and designing solutions

SCIENCE: Students will learn how to sort waste (bottles/cans, paper recycling, compost, land fill) in their classrooms and in the cafeteria.

Learning goal #4: Applying math; collecting and evaluating data

SCIENCE: Students will conduct a waste audit in their classroom.

#### **Examples of Climate Change Education**

- Climate Change Professional Development Opportunities with Alliance for Climate Education
- Assemblies with ACE

STANDARDS: [MS-ESS3: Earth and Human Activity](#)

- MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment
- MS-ESS3-4. Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.
- MS-ESS3-5. Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.

