

RESILIENT SAN CARLOS SCHOOLYARDS
Administrative Draft - Vision Statement, Goals and Implementation Strategies
October 15, 2021

VISION

San Carlos School District’s vision is to use its school grounds to demonstrate ecological and social resilience while strengthening children’s education and well-being, promoting school community health, adapting to a changing climate, and managing stormwater. The District, in partnership with the City/County Association of Governments of San Mateo County, seeks to create a replicable model for other school districts to promote resilience and crisis preparedness through heat and stormwater management.

GOALS

School grounds in San Carlos School District will be designed to:

1. **LEARNING - Support outdoor teaching and learning and embody and reflect district-wide educational goals**
Resilient Schoolyards will be hands-on learning environments for students of all ages that are integrated with standards based instruction and with the District’s vision for the development of the “whole child.”
2. **HEALTH - Care for the “whole child” by fostering social, emotional, cognitive, and physical development**
Resilient Schoolyards will promote students’ whole development, health, and well-being by increasing physical activity, deepening understanding of nutrition, fostering social-emotional and mental health, and optimizing environmental health through school ground design and management.
3. **CHILDREN’S DAILY SPACE - Protect and prioritize children’s use of school grounds and treat the land with care**
Resilient Schoolyards will center children’s ideas, needs, and priorities in their overall site designs, and will ensure that students will not lose access to school ground space as the sites are developed. Site interventions will be designed to restore and improve local ecological systems and make school ground land cleaner and safer for the children and adults who spend time onsite.
4. **ECOLOGY: Adapt green infrastructure on the grounds to be beneficial to children**
Resilient Schoolyards will integrate green infrastructure opportunities for climate adaptation (e.g. addressing extreme heat, drought, and flooding) that are specific to the needs of children while also producing outcomes that are optimized to equally benefit children’s learning and health, climate resilience, and stormwater management.
5. **COMMUNITY - Foster community and public partnerships to increase access to, engagement with, and support for Resilient Schoolyards’ grounds and programs**
Resilient Schoolyards will be vital community spaces which will thrive with collaborative partnerships. The District is uniquely positioned to partner with the City, County, community members, and community-based organizations to create mutually beneficial spaces that support children’s education and well-being while generating benefits for the

community such as access to nature and improved food security. Involving students in the process of building these spaces helps connect them to their communities while building confidence and boosting mental health.

6. CULTURE - Work to proactively change the educational, maintenance, facilities, and supervision culture to embrace ecologically rich outdoor environments that support the whole child

In order to be built at an impactful scale, Resilient Schoolyards need the District to allocate construction budgets for green infrastructure integration. Children ‘read’ the schoolyard landscape (consciously and subconsciously) and perceive the value the adult world places on them and the natural environment. In order to thrive, Resilient Schoolyards need the District to alter professional practices that positively impact children’s learning, play time, and environment to match the physical changes.

7. SITE DESIGN - Create physical site improvements to address climate resilience and benefit students

Resilient Schoolyards will be multi-benefit landscapes designed to capture and reuse stormwater while maximizing additional benefits such as improved mental health through connection to nature. The District will study opportunities for regional stormwater capture as well as site-based schoolyard capture to determine the most suitable site improvements, while ensuring that site designs are informed by education and ecoliteracy goals. The District seeks to use space optimally and equitably by balancing the needs of ball play with outdoor learning and nature exploration as well as increasing the amount of permeable ground surfacing and tree canopy on the grounds.

IMPLEMENTATION STRATEGIES

1. LEARNING - Support outdoor teaching and learning and embody and reflect district-wide educational goals

- Include outdoor classrooms in each schoolyard with opportunities for hands-on learning.
- Design outdoor learning environments based on input from teachers.
- Harness the natural features of the school, its surroundings, and stormwater management strategies for educational purposes.
- Use the grounds to support standards-based, hands-on curricula across PK-12 grade levels, including NGSS and the five Cs -- Critical thinking and problem solving, Communication, Collaboration, Citizenship (global and local), and Creativity and innovation.

2. HEALTH - Care for the “whole child” by fostering social, emotional, cognitive, and physical development

- Integrate school curricula from every discipline with outdoor spaces and physical movement to harness the mental and physical benefits of spending time outside. Establish a regular routine of being outdoors to build healthy habits.
- Design the school grounds to offer a variety of experiences, from edible landscapes to restorative spaces for individuals and small groups to areas for active and imaginative collaborative play.
- Integrate graduated challenges into the landscape and design spaces to be as safe as necessary rather than as safe as possible.

3. **CHILDREN'S SPACE - Protect and prioritize children's use of school grounds and treat the land with care**
 - Children are the primary users of school grounds and access them as their daily landscape, thus their needs are the top priority when developing a Resilient Schoolyard.
 - Avoid adding potential pollutants on or under the ground surface (e.g. If stormwater from offsite will enter the property, keep it confined to places on the property that are most likely to already have some pollutants present, such as parking lots.)
 - Maximize accessibility to and visibility of stormwater interventions. Avoid creating areas that are "off limits".
 - Avoid use of pesticides and herbicides on school grounds.
 - Minimize potential contaminants from entering the site by diverting and/or treating stormwater runoff.
4. **ECOLOGY - Adapt green infrastructure on the grounds to be beneficial to children**
 - Aim for a minimum of 30% tree canopy cover in child-accessible areas of the schoolyard to address the Urban Heat Island effect and avoid planting trees in patterns that direct air pollution from nearby streets.
 - Select drought-tolerant plants that are expected to be resilient to a changing climate.
 - Aim for a minimum of 30% pervious surface and minimize impermeable surfaces wherever feasible; maximize areas with natural and vegetated surfaces.
 - Minimize the use of chemically based and future landfill materials such as synthetic turf and rubber safety surfacing.
 - Select materials with high SRI values.
 - Make green infrastructure an accessible, visible, interactive, and educational part of the landscape.
5. **COMMUNITY - Foster community and public partnerships to increase engagement with, access to, and support for Resilient Schoolyards grounds and programs**
 - Include the community and the students in the conceptual design and planning of the Resilient Schoolyard.
 - Include the community and students in the design and construction of elements that can be safely community-built.
 - Open up Resilient Schoolyards to community members during non-school hours.
 - Identify neighboring parks and open space adjacent to school grounds, such as parks, creeks, or drainage channels, to aggregate possibilities for community open space and climate resilient systems.
 - Develop partnerships with local jurisdictions and organizations to aggregate land management and resources across jurisdictions and land owners.
 - Develop clear expectations for maintenance and responsibilities between all parties and maintain clear communication with all partners regarding the development of and management of Resilient Schoolyards.
6. **CULTURE - Work to proactively change the educational, maintenance, facilities, and supervision culture to embrace ecologically rich outdoor environments that support the whole child**
 - Pass a school board policy to adopt Resilient Schoolyards as a long-term version for the school district .
 - Include Resilient Schoolyards in the next Facilities Master Plan update.

- Include Resilient Schoolyards in future budgets and funding plans.
 - Create green schoolyard master plans for each school that identify opportunities for climate adaptation.
 - Provide professional development for teachers to help them utilize the school grounds for learning, transition to teaching outside, and adjust supervision as the grounds change.
 - Transition maintenance and stewardship to effectively manage greener grounds, including new/expanded professional development and training opportunities for teachers and school/district staff.
- 7. SITE DESIGN - Create physical site improvements to address climate resilience and benefit students**
- Design Resilient Schoolyards to uniquely reflect the school's ecological setting and characteristics of the local community.
 - Design regional and site stormwater elements in Resilient Schoolyards to maximize stormwater capture, harvest, and infiltration within the watershed while providing visible and tangible environmental benefits to the site that clearly demonstrate the stormwater processes and offer potential benefits of cooling, flow management, non-potable reuse, etc.
 - Design Resilient Schoolyards to support all ages, stages, and abilities as well as provide a diversity of spaces for play and learning that support physical, social, emotional, and cognitive development. Spaces could include places to gather, to be active, to experiment, to have quiet, and to be in an ecological setting.
 - Build in resilience by reducing impervious surfaces, increasing green elements that improve water management, soil, air quality, and the environment.
 - Design Resilient Schoolyards to utilize low tech and low maintenance systems and make use of natural processes that make maintenance more efficient and afford learning opportunities.
 - Incorporate open-ended elements in Resilient Schoolyards that serve many purposes.