



Bay-Friendly School Garden Case Study

Peralta Elementary School Tel: (510) 879-1450
460 63rd Street, Oakland, CA 94609

Year garden started: 1997

Grades involved in garden: K-5

No. of garden teachers: No designated garden teachers. All teachers teach a garden lesson at least once per week.

No. of students involved:
Approximately 250

Student hours in garden per week:
Approximately 1 hour

No. of students in the garden at a time: 20-35

Length of a garden lesson:
Approximately 1 hour

Examples of garden curriculum:
Math in Garden (UC Botanical Garden & Lawrence Hall of Science);
FOSS Kits (Full Option Science System)

No. of parents/community volunteers involved: 20-60

Parent/community hours volunteered per week: Approximately 10-70 hours

Other garden activities:
Students' afterschool gardening club meets every Thursday for 1.5 hours
Family garden work day held the first Saturday of each month from 9 am-1 pm
Students and parents have access to the garden before and afterschool as well as during recess and lunch time.

Total square footage of garden(s):
Approximately 12,000 sq. ft.



Garden Description:

Peralta Elementary School is a K-5 public school of 250 students that is an urban oasis. The teachers, principal, parents, and community members have transformed this once mostly black-topped school site into one that is surrounded by colorful ornamental and edible flowers, vegetables, Mediterranean plants and trees. The gardens are complemented with kids' murals, decorative tiles, banners, and metal sculptural pieces.

There are five garden areas located throughout the campus:

1. The main garden area includes a colorful hand-molded ceramic tiled Amphitheater providing a seating area for classrooms that is surrounded by fruit trees (apricot, plum, nectarine, and peach), perennial borders and raised beds with edibles;
2. The entrance garden, located at 63rd Avenue, includes daisies, flax, wild grasses, and flowering buddleia bushes that provide nectar for pollinators alongside the walkway;
3. The courtyard garden (decimated in a school fire in 2007) is flourishing once again with in-ground beds and pots that include two pistache trees, a variety of native grasses, heuchera, ferns, edible flowers and large boulders;



4. The north street garden provides a space for each classroom to maintain their own garden bed filled with organic vegetables that vary by season. There are also sloped areas with a plethora of Bay-Friendly plants; and
5. A newly constructed 3,000 square foot "Kindergarten Discovery Play Area & California Creek Bed" that will encourage the youngest Peralta students to have their own natural play area including a playhouse, climbing wall, seating and raised garden beds.

Highlights of Bay-Friendly School Garden Practices:

Peralta's main garden was registered as a Bay-Friendly School Garden in 2006. All of the gardens incorporate Bay-Friendly practices. A large portion of the school's asphalt and concrete areas have been removed and replaced by permeable surfaces filled with perennials, edibles, and trees.

The latest addition to the school campus, the "Kindergarten Discovery Play Area & California Creek Bed" features a California creek bed ecosystem designed to catch rainwater but remain dry for most of the year.

This area has been designed to encourage young children to interact with their natural environment through hands-on experiences and free play in a natural setting.



Peralta Bay-Friendly Practices:

-  **Builds Healthy Soil**
 - Sheet mulching is used to establish planting areas
 - Soil is amended with compost
 - Cover crops (fava beans & vetch) are grown to enrich the soil
-  **Reduces Waste in the Garden**
 - Garden trimmings are composted either on-site or in green waste cart
 - Pruning is minimized by choosing plants that are appropriate for the space
-  **Conserves Water**
 - Efficient irrigation (drips, timers, and soaker hoses)
-  **Creates Wildlife Habitat**
 - Wildlife is encouraged with a variety of plants
 - Garden areas include Mediterranean or native plants adapted to a summer dry climate
-  **Protects Local Watersheds and the Bay**
 - Non-permeable surfaces removed and replaced by permeable surfaces
-  **Contributes to a Healthy Community**
 - Organic vegetable garden provides food
 - An integrated approach is used for controlling weeds, insect pests, and diseases
-  **Saves Energy**
 - Trees and shrubs are selected and placed to reduce energy requirements
 - Solar panel supplies energy
-  **Builds a Network of Community Support**
 - Monthly family garden work days
 - Support is sought from the school district for funding and supplies
 - Regular meetings, website and newsletter provides updates to the school community
-  **Encourages Play, Learning and Teaching in the Garden**
 - Students participate in weekly garden lessons and activities
 - Students have unstructured time for exploration
 - Outdoor seating area for students

Garden Management:

The garden is overseen by the Parent Teacher Garden Committee and the school principal coordinates the use of garden space by the teachers during the school day. Parents help with watering and the community also helps at garden work days.

Garden Education Program:

Every teacher takes their students out to the garden at least once a week and uses it to teach science, math, art, and language arts lessons.

Bringing the Garden back into the Classroom:

There are numerous ways that the garden is brought into the classroom curriculum.

1. *Math in the Garden* curriculum – provides opportunities for students to apply mathematical concepts such as graphs and plots in a natural setting. For example, they use string to divide raised beds into sections and transfer the coordinates for specific plants onto graph paper.
2. Kindergarten students use the garden for inspiration during journaling, where they write about the coming of spring using their powers of observation.
3. Peralta students participate in an annual heritage project. They study California and Native American history, including a discussion of seasonal crop plants. Kids plant beans, corn and squash that are then harvested by the next year's students for a Thanksgiving feast.



Engaging Teachers:

All of the teachers use the garden as part of their weekly teaching. Teachers also participate in regular garden committee meetings and special projects as necessary.

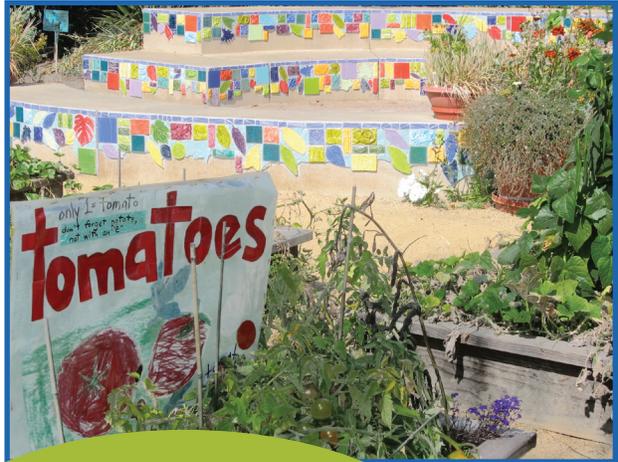
Engaging the Community:

A garden work day is held the first Saturday of every month from 9 am-1pm. Parents and community members (sometimes prospective parents) come volunteer to maintain the garden.

A weekly afterschool produce stand brings nutrition to the school by offering a variety of organic fruits and vegetables for sale from the Berkeley Farmer's Market on a sliding fee scale.

Funding:

- Peralta Parent Teacher Group
- City Councilmember Pay Go Funds
- Lower Rockridge Parent Group Yard Sale
- Rotary Club of Oakalnd
- In-kind contribution from the school district (i.e. for asphalt demolition)
- Lowes Charitable and Educational Foundation
- In-kind architectural design work by parents and community members
- Tides Foundation
- In-kind donations from local cement business



"We know the gardens enrich the students' lives, they tell us so!"
-Calvert Hand, 1st Grade Teacher

For more information, go to www.StopWaste.Org

