

# **Sustainable CU Grant Application for Casey Sustainability Garden**

March 2011 – Tori Kraft

Casey Middle School  
1301 High Street, Boulder, CO 80304  
720-561-2700

Grades 6-8 (public school)

<http://bvsd.org/schools/Casey/Pages/default.aspx>

Alison Boggs, Principal

450 students

Asian – 4%

Caucasian – 53%

Hispanic – 39%

African American – 1%

American Indian – 3%

## **Short Description:**

The undergraduate program in Environmental Design (ENVD) is seeking a grant to be used to plant a “sustainability garden” with Casey Middle School students as part of the service-learning component of the Designing With/For Schools course. The objective of the course is to provide opportunities for ENVD students to experience design processes “in the real world” as they put theory into action with the creation and delivery of participatory design activities with students at Casey Middle School. The sustainability garden is one project that will be collaboratively designed and constructed during class. A site of approximately 400 feet has been selected at Casey Middle School for the sustainability garden. ENVD students will guide Casey students in producing design drawings, material take-offs, and a construction plan. Together they will build, plant, and maintain the garden. Funding in the amount of \$2,500.00 is requested for soil preparation, plants, irrigation, and construction materials (which consists of as many reclaimed and recycled items as we can find). The project will support the goals of the Boulder Valley Schools healthy lunch program and the Casey Sustainability Ambassadors program by teaching about composting, planting, harvesting, and sustainable food sources.

## **Student Involvement:**

Students from the Applied Science class (open to 6<sup>th</sup>-8<sup>th</sup> graders) will utilize the garden as a living classroom, and the teacher, Ms. Kimmel, will work with students from ENVD to develop and implement curriculum throughout the year. The Applied Science class has approximately 25 students each year. Casey will also organize an after-school Garden Club of 10-15 students in Spring 2011. Casey frequently collaborates with students from the University of Colorado on projects, in this case, the School of Environmental Design.

## **Student Impact:**

During the last few two months, our class of over 20 students has worked with Casey Middle school sixth graders every week. Our teams have been able to participate in this design from the ground up. The work with Casey provides us all with a sustainable design experience from start to finish. When we actually build the raised beds, install fencing, put in the soil, plant and mulch, we will need lots of assistance from the community and will definitely let our local community of students know of our plans and invite them to help. We will also have opportunities during the 2011-12 school year for people with gardening experience to come and help with planting, maintenance, and harvesting in our garden.

**Total project budget:**

*\* Please consider these prices are for reclaimed items, as our mission for the project is to use as much recycled materials as possible.*

Seeds: 20 @ \$5 = \$100  
Fiber pots: 20 @ \$5 = \$100  
Seed starter (soil) 20 @ \$13 = \$260  
Plants: 25 @ \$5 = \$100  
Materials for raised beds: 4 @ \$200 = \$800  
Topsoil: 8 @ \$17 = \$136  
Soil amendments: 3 @ \$21 = \$63  
Soaker hose: 2 @ \$30 = \$60  
Mulch: 2 @ \$25 = \$50  
Netting: 4 @ \$20 = \$80  
Fencing: 3 @ \$72 = \$216  
Fenceposts: 5 @ \$25 = \$125  
Hardscape: 2 @ \$55 = \$110  
Wheelbarrow: 2 @ \$175 each = \$350  
Garden Rake: 2 @ \$15 each = \$30  
Pruners/clippers: 3 @ \$15 ea = \$45  
Hand trowels: 15 @ \$10 ea = \$150  
Large shovels for digging up old plants, turning soil; 3 @ \$15 each = \$45  
Hoes: 2 @ \$15 each = \$30  
Long lasting watering cans: 2 @ \$35 each = \$70  
Birdhouse and Birdbath 2 @ 30 each = \$60  
Paint = \$20  
Tree = \$70  
Shed: \$1500  
Compost bin: \$200  
Delivery charges: \$200  
Total: \$5,000

Amount of money applying for: \$2,500

Will it cover costs of project: No

Money already raised: \$2,500

Group will request funding from PTA and other grant sources for schoolyard gardens.

**Other fundraisers and/or grantors:**

Grantors: University of Colorado School of Environmental Design - \$2,500

**Timeline/Schedule:**

March 2011 – ENVD Design teams complete and present designs

April 2011 – Casey staff, students, and ENVD teachers review and choose design

May 2011 – Purchase materials based on design needs; begin constructing and planting Garden

Establish watering system; establish schedule for students to maintain the garden during the summer months

Summer months 2011 – students and families will alternate maintenance of garden

August 2011 – School begins; Applied Science begins maintenance and care of Garden  
September 2011- May 2012 – Applied Science students and teacher work with ENVD team to fully establish, work in, and learn from garden, utilizing ENVD curriculum.

### **Sustainability:**

Casey Middle School aims to establish a Sustainability Garden to contribute to learning both in class and during after-school activities. First, the Garden will function as an outdoor classroom for the Applied Science class. Here, students will be able to see and practically apply their learning about irrigation, water systems, engineering, sustainability, and design. As part of the curriculum, students will plant, maintain, and harvest the garden. Casey will also establish an after-school Garden Club, whose members will be recruited from the whole school student body. Garden Club members will work with students from the University of Colorado School of Environmental Design (ENVD) to choose from multiple garden designs, construct the garden based on the final design, plant, set up irrigation systems, maintain, and harvest the garden during the last months of the 2010-11 school year and throughout the 2011-12 school year.

Nearly half of Casey students are on the Free and Reduced Lunch Program, so instructing students about nutrition, waste, recycling, and sustainability through the hands-on experience of a garden is very important. One critical component of the Garden Club will be connecting students to the food that they eat, and helping them to understand that their food affects their health and well-being. Boulder schools are very fortunate to have a school lunch program that emphasizes whole grains, minimally processed foods, and locally grown produce whenever possible. The Sustainability Garden will reinforce these lessons, and will teach the importance of the origins of the food we eat in a hands-on way. We believe that the “living curriculum” that our Sustainability Garden will bring is crucial to helping our students learn about composting, harvesting, planting, and sustainability, in addition to nutrition and the food we eat.

Casey Middle School just moved into a new “green” school building at the start of the 2010-11 school year. Sustainability is a theme woven into the curriculum at Casey and the middle school students have expressed concerns about lunchroom waste and healthy foods. This project will support the goals of the Boulder Valley Schools lunch program, the Casey Sustainability Ambassadors program, the “CU Going Local” and Earth Education initiatives, as well as provide experiential learning and stewardship opportunities for the ENVD and middle school students. At 41%, Casey has a high percentage of low-income students, making fundraising among the parent community challenging. This grant will fund the basic equipment for the garden so students can participate in planting, maintaining, and harvesting for many years. School grounds are often overlooked for valuable learning opportunities and this project may serve as a model to other schools in the area.