

A Raised-bed Garden Teaching Space at the Cal Poly Student Experimental Farm

Prepared by Nick Babin, NRES Department, 11/20/18

Purpose: To establish a raised-bed garden at the Cal Poly Student Experimental Farm (SEF) for use in Natural Resources Management and Environmental Sciences (NRES) department courses.

Description: The space is proposed for the area outlined in red in the image below. The area will be populated with 18 (8 ft. x 4 ft. x 1 ft.) raised beds.

The construction of the beds and the preparation of soils will be completed as a final project within my winter 2019 course *FNR 323: Social dimensions of sustainable food and fiber systems*. After construction, this garden will be of ongoing use in the following two classes that I will teach at Cal Poly:

NR 324: Human dimensions in natural resource management (starting spring 19). In this course the garden will be used in an agricultural and eco-literacy unit.

NR 470: Selected advanced topics (starting fall 19). This special topics course in agroecology will use the beds in a quarter-long intercrop experiment. The intention is that this course will be added to the NRES catalog after running as a special topics course.

Operations: The walnut and fig trees that are marked with green circles in the image below would need to be removed. There is adequate irrigation water from risers on site. Ongoing operations/ maintenance of the beds will be coordinated by myself via classes and undergraduate and graduate student projects.

The area outlined in purple below is still in the midst of a planning process that includes FEED and other active student groups at the SEF including the Gardening Club.

Budget:

2 in. x 12 in. x 8 ft. rough redwood boards, 54 x \$40 each = \$2160

4 in. x 4 in. x 4-1/2 ft. cedar posts, 36 x \$30 each = \$1080

#10 x 3 1/2 in. wood deck screws, 6 boxes x \$10 each = \$60

1/2 in. x 4 ft. x 50 ft. hardware cloth, 3 rolls x \$85 each = \$255

576 cubic feet of soil (21.3 cubic yards)

- 70% compost – 403.2 cubic feet (15 cubic yards), donated from CalPoly compost
- 15% sand- 86.4 cubic feet (3.2 cubic yards), donated from CalPoly operations
- 15% coconut coir – 86.4 cubic feet (3.2 cubic yards), 36 blocks at \$17 each= \$612
- 4 lb bags of 4-6-3 organic fertilizer, 10 bags at \$12 each = \$120
- 3 cubic yards of mulch for pathways, donated from CalPoly operations

Assorted seeds, 20 packets at \$3.50 each = \$70

Drip irrigation system, 18 beds at \$30 each= \$540

TOTAL = \$4897

A Raised-bed Garden Teaching Space at the Cal Poly Student Experimental Farm



Drone image of the Student Experimental Farm with proposed raised-bed teaching garden outlined in red.