



Channel Islands

CALIFORNIA STATE UNIVERSITY

**Materials, Services, Facilities and Technology Fee
Fiscal Year 2014-2015 Budget Request Form***

DUE: Friday, February 14, 2014 @ 5:00 P.M.

Please return completed requests via email to gina.matibag@csuci.edu

If you have questions about this form, please contact Gina Matibag at (805) 437-3320
For additional information please consult the MSFT web page.

Project or Activity Title: Santa Rosa Island Outdoor Classroom Infrastructure

Name of organization requesting funds: Santa Rosa Island Research Station Date: 10-Feb-14

Requestor: Cause Hanna Contact Phone Number: (805) 437-3785 E-mail: cause.hanna@csuci.edu

Amount of MSFT Funding Requested: \$13,248

Date Funding Needed by: June 2014

Will you receive funds from any other source(s)? NO

If yes, please detail amount requesting from other source(s) as well as your total request for fiscal year 2013-2014 (including request from MSFT).

Has this project or activity previously received MSFT funding? NO

If yes, please attach copy of report

Please describe how the use of MSFT funds for this project or activity will benefit the CI student body.

Please provide the following in your application. You may attach additional pages and materials (applicants may be requested to meet with the committee to discuss proposals):

- Brief Project Description.** Describe the project and its benefits to the educational or co-curricular experience of students at CI. Please provide specific information about how MSFT funds will be used and their impact on the campus. Please describe how this project benefits CI students? Please describe items and provide justification if your request includes the purchase of computers, equipment, furniture or other materials. Please provide a timeline for implementation of the proposed project. If physical improvements are requested please describe need, scope and impact of work to be completed. If the project includes provision of services please indicate the type of service, personnel costs and level or quantity of service to be provided with project funds.

schedule and priority of project items to be considered if the project is funded at a reduced level. Were other, less costly, approaches considered when preparing the budget for the project? Are there elements that could be eliminated or deferred if funding is not available for the entire project?

3. **Project Assessment.** Describe how the effectiveness of the project will be assessed and measures that will be used to determine if it has attained its objectives. Please note a report will be due at the end of the semester (or fiscal year for annual projects). If funded, how will the project acknowledge the use of student funds so that students are aware that their student fees made (or helped to make) it possible? If appropriate, indicate how the project or activity promotes sustainability at CI.
4. **Sources of Project Support.** Please list the other sources of funding, and additional support for the activity. Please explain if MSFT is the only source of support for the project.

Fiscal Management: Project sponsor's unit or department may be responsible for incurred over and above what is funded through the MSFT. If support is requested for costs beyond initial award, or for use on activities or materials not included in approved proposals, the project sponsor must seek approval from the MSFT committee. The project sponsor will be responsible for managing purchases and transfers of funds related to approved projects.

Please review MSFT web page for information about the fund and its objectives before submitting your application.

CSUCI Santa Rosa Island Research Station MSFT Proposal

A. Brief Project Description

The mission of the CSUCI Santa Rosa Island Research Station (SRIRS) is to advance the interdisciplinary knowledge and natural and cultural resource stewardship of the Channel Islands through long-term research, inquiry-based education, and public outreach. Specifically the SRIRS will place CI students at the center of the educational experience by:

- 1) Implementing an experiential and interdisciplinary curriculum that engages students across academic levels.
- 2) Developing and supporting student knowledge and critical thinking skills through inquiry-rich STEM learning activities.
- 3) Utilizing project-based learning activities to involve students in real-world data collection, analysis, and problem solving within Channel Islands National Park.
- 4) Emphasizing undergraduate research that will enable students to gain perspective on interdisciplinary issues in a complex system, thus change students from passive to active scientists and learners.

This proposal is requesting funding for SRIRS infrastructure that will benefit the educational experience of students at CI by supporting the objectives listed above. Our proposal is requesting funding for 1) an outdoor classroom and 2) telecommunications infrastructure.

Outdoor Classroom. Currently the SRIRS is capable of housing twenty CI students, however there is currently no dedicated classroom space. Ten CI student research groups and/or courses are scheduled to utilize the SRIRS during the spring semester and Archeology and Environmental Science field camps will be offered at the SRIRS this summer. The SRIRS just became fully operational this semester (Spring 2014) and there is already a high level of CI student activity and interest. The usage of the SRIRS by CI students will continue to grow and the construction of an outdoor classroom will enable the station to better support their corresponding educational experiences. We are proposing to transform an existing concrete patio on the side of the SRIRS bunkhouse into an outdoor classroom (see pictures below).



The construction of the proposed outdoor classroom will include:

- 1) *Walls*. The renovation and/or replacement of the wooden fence and wall will be performed in order to provide adequate weather protection. This will entail replacing the structural beams and compromised wood, increasing the height of both walls to 8 feet, and adding two windows within each of the walls.
- 2) *Roof*: The addition of a roof composed of wooden rafters and corrugated plastic/metal roofing will be connected to the exterior wall of the bunk house.
- 3) *White Board and Projector*: The procurement of a movable white board and projector, which we will use as part of the outdoor classroom and inside the bunkhouse.
- 4) *Electricity*: The addition of electrical outlets and lights on the exterior wall of bunkhouse, comprising one side of the outdoor classroom.
- 5) *Picnic Tables*: The construction of five picnic tables which we will use for the exterior classroom and nearby patio and lawn.

The construction of the outdoor classroom will be performed by two facility services staff members and volunteers over a three day period. The costs associated with materials, labor, and travel are included in the budget.

Telecommunications Infrastructure. SRIRS is currently working in collaboration with Channel Islands National Park to improve the communication and wireless capability on Santa Rosa Island. Channel Islands National Park is actively obtaining permission and has obtained the necessary equipment to send a microwave radio transmission from Santa Ynez Peak to Black Mountain on Santa Rosa Island. Channel Islands National Park has agreed to cover the cost of transmitting the microwave radio transmission to Santa Rosa Island and to share the bandwidth with CI. However, CI is responsible to transmit the signal to the SRIRS bunkhouse and lab complexes. The proposed telecommunications improvements to the SRIRS will increase the safety and research capabilities of CI students. Currently park radios are the only form of communication at the SRIRS and they have limited reception and there is a limited quantity. The microwave radio transmission will add another communication option by enabling the use of cell phones in and around the SRIRS. There is also currently no internet access at the SRIRS. Access to the internet will vastly expand the research and educational opportunities for CI students at the station. Lastly, the wireless access will enable a greater number and wider range of CI students to use the research station by providing distance learning opportunities (i.e., bald eagle nest cameras, live interactive science videos, long-distance data collection, etc.).

The installation of the proposed telecommunications equipment will be performed by the NPS IT specialist and the telecommunications infrastructure will be maintained by the SRIRS Manager.

B. Project/Activity Budget.

In total we request \$13,248 to complete the proposed SRIRS outdoor classroom and telecommunications projects.

Outdoor Classroom. We request \$8,408 to complete the proposed SRIRS outdoor classroom. Specifically, we request \$5,200 for the **supplies** associated with the outdoor classroom (Table 1), \$3,000 to cover the **labor** of two facility services personnel for three days each, and \$208 to cover their **transportation** to and from the island.

Table 1. Outdoor classroom supply costs.

Item	Cost per Item	Quantity	Total Cost
Lumber	N/A	N/A	\$2,000
Windows	\$125	4	\$500
Roofing	\$30	15	\$450
Hardware	N/A	N/A	\$250
Electrical (wire, lights, and outlets)	N/A	N/A	\$200
Picnic Tables	\$200	4	\$800
White board	\$250	1	\$250
Projector	\$750	1	\$750
Total			\$5,200

Telecommunications Infrastructure. In total we request \$4,840 to purchase the **equipment** for the proposed SRIRS telecommunications infrastructure project (Table 2).

Table 2. Telecommunications equipment costs.

Item	Cost per Item	Quantity	Total Cost
Ubiquity Nano Beam	\$100	5	\$500
Ubiquity Outdoor WiFi Access Point	\$140	3	\$420
Outdoor Cat 5e Cable	\$200	1	\$200
Universal Mounts	\$80	8	\$640
Mono pole, hardware, and connectors	\$700	1	\$700
Managed Switch	\$2,000	1	\$2,000
Black Box Rack Low Profile	\$380	1	\$380
Total			\$4,840

If our proposal is funded at a reduced level our priority of the proposal items are:

- 1) Outdoor classroom structure (\$6,608)
- 2) Outdoor classroom picnic tables (\$800)
- 3) Outdoor classroom white board and projector (\$1,000)
- 4) Telecommunications infrastructure (\$4,840)

C. Project Assessment.

The proposed projects will be assessed by quantifying user days of the outdoor classroom and telecommunication for CI students. We currently survey CI students after they use the SRIRS and classroom space and telecommunications have been their main demands/recommendations. We will continue to survey all CI students who use the SRIRS and specifically ask them how the outdoor classroom and telecommunications infrastructure impacted their educational experience.

The project will acknowledge the use of CI student funds by installing a plaque stating so in the outdoor classroom and explicitly stating that the CI students were the source of funding within our SRIRS user guidelines and facility description.

The project promotes sustainability because 1) we are utilizing existing infrastructure, thus reducing the quantity of material used and 2) the natural light provided to the outdoor classroom will reduce the use of electricity.