

MEMORANDUM
OFFICE OF THE
BOARD OF SUPERVISORS
COUNTY OF PLACER

TO: Honorable Board of Supervisors

FROM: Teri Sayad-Ivaldi, Senior Administrative Aide

DATE: June 5, 2012

SUBJECT: REVENUE SHARING – Approve appropriation of \$1,000 in Revenue Sharing monies to the *Del Oro High School's Aquaponics Project*, as requested by Supervisor Holmes (\$1,000).

ACTION REQUESTED

Approve appropriation of \$1,000 in Revenue Sharing monies to the *Del Oro High School's Aquaponics Project*, as requested by Supervisor Holmes (\$1,000).

BACKGROUND/COMMUNITY BENEFITS

In approving the following contributions, the Placer County Board of Supervisors finds that each and every approved contribution serves a public purpose by promoting the general welfare of the County and its inhabitants therefore a benefit results to the County.

The Board of Supervisors is being asked to approve appropriations to help support the Del Oro High School *Aquaponics Project*. Del Oro High School Agricultural-Science/Future Farmers of America students and teachers will be promoting this project by helping to facilitate events such as local farmers' markets and co-ops. The objective of the *Aquaponics Project* is to develop a curriculum that focuses on efficient greenhouse production, harvesting of produce, and the marketing and sale of produce through local farmers' markets, culinary arts programs and local restaurants and providing fresh produce to be served in the school cafeteria.

The *Aquaponics Project* will also be entered in Regional, State and National competitions, as well as Future Farmers of America/school related competitions nationwide. The community benefit of this project will be based on the multitude of high school students who have learned the dynamics of building and operating an aquaponic food production system. Funding will go directly toward material costs for initial assembly and components for this project.

FISCAL IMPACT

Funds are available in the Revenue Sharing budget.



Please attach your letter of request to this application



Revenue Sharing Funds

Application for funding Districts 2 - 4

The Placer County Board of Supervisors has actively promoted revenue sharing funding as a means to provide financial support for local events, fundraising, programs, supplies, improvements, and equipment needed to help non-profit and community based organizations. In approving the revenue sharing contributions, the Placer County Board of Supervisors finds that each and every approved contribution serves a public purpose by promoting the general welfare of the County and its inhabitants therefore a benefit results to the County.

Please complete, print and sign the application and include it with your letter of request.

Organization: Del Oro High School FFA Telephone: (530) 305-7090
 Address: 3301 Taylor Rd. FAX: ()
95690 Email: deloroagriculture
 Website: Attention Pierre Beauchamp
Del Oro Aquaponics

Briefly describe the community benefit the organization, event, program or project provides:

The community benefit will be measured based upon the amount of students who have learned the dynamics of building and operating aquaponic food production systems. At Del Oro High, food production will reach the school cafeteria, culinary arts program and local restaurants.

Briefly describe how funding will be utilized by listing what items will be purchased:

Funding will go directly to material costs of initial assembly and components

Has this organization received Revenue Sharing Funds in the past? Yes No

If yes, specify year(s), event and amount:

I swear under penalty of perjury that the information supplied herein is true and correct

Daniel T. Gayaldo
APPLICANT'S NAME

Daniel T. Gayaldo
APPLICANT'S SIGNATURE

5-3-12
DATE

Office Use Only

Date Request rec'd _____

If recommended for approval; BOS mtg date: _____

Date Application rec'd 4/23/12

Amount received _____

Amount Requested _____

Date funding check mailed _____

Previous contributions: _____

Del Oro Aquaponics

Project Objective:

- To develop a curriculum that focuses on efficient greenhouse production and harvesting of produce.
- Marketing and sale of produce through local farmers' markets, school cafeteria, school culinary classes and CSA.
- Provide agricultural science students with an opportunity to participate in an agricultural based business operation focusing on new technologies and applications.
- To provide a revenue source to cover the cost of the project.
- Introduce alternative and leading edge agricultural practices including hydroponic, aquaponic and traditional methods.
- Teach students how to replicate the business model and construct alternative systems for producing food.

Collaboration

Future Farmers of America - The FFA is an established national organization that has an active Student Chapter at Del Oro High School. The FFA would be the lead organization sponsoring this project.

- Leadership Support - the student body of the FFA will be engaged in helping facilitate events such as farmers markets and co-ops.
- Financial support – we will apply for grants and other scholarships, we will collect funds from community organizations such as the Rotary and Lions Club.
- Project competitions - the Project will be entered in the Regional, State and National competitions, as well as many FFA/school related competitions nationwide.
- Provide access to Del Oro High School greenhouse.
- Farmers market – the produce that is produced will be sold at farmers' markets in the Placer county region.
- The Project will be open to participation for students of all grade levels. We believe that this Project will provide students with Senior/SAE Project opportunities.
- The Agricultural Sciences Department at Del Oro High School will establish a full “real life” business model with related curriculum and entrepreneurial dynamics.

Del Oro High School – In cooperation with Regina Dvorak's Agricultural Sciences Program.

- Del Oro High School administration will have an opportunity to lead an emerging agriculture technology program that will be sought after and will be a model for other school programs.
- This program will provide outreach to area high schools throughout the district and region.

Student Involvement

- The Project will provide ongoing opportunities for students at Del Oro High to participate in an inclusionary program. Providing work and educational opportunities.
- Labor - students will be active in building the systems from start to finish.
- Strategic planning and support – students will learn how to create business plans and organize events and farmers' market days.
- It is envisioned that students will be able to accept accountability for particular “positions” and “functions” as if this were a private business endeavor.
- Students will be held accountable for completion of specific strategic and tactical functions that reflect business situations.
- It is contemplated that once the project is implemented, school courses will be established in the Project scope that would provide course credits.

Community Support

- The Project will reach out to the local and regional business and services community in an effort to further link the Del Oro High School programs to the public.
- The Project will seek community support in the form of monetary and in-kind contributions. This will provide students an excellent opportunity to integrate into community activities that will nurture exposure to the adult community.
- Local and regional participants may include area social service organizations (Rotary, Lions, Chamber of Commerce, etc.)
- The Project will be presented to the City of Loomis, Placer County and State representatives in an effort to gain their support and recognition of the program.

Proposed Systems:

System #1: Ebb and flow pebble bed/deep water culture

- 300-gallon reservoir to supply water to the system and contain 100 – 200 fish (figure 1)
- The fish that will primarily be grown are catfish and koi depending on demand.
- The water from the reservoir is then gravity fed into a 10 gallon cylindrical “solids” holding tank
- The solids collector will gravity flow into the first grow bed system made up of three 4' x 8' polyethylene grow beds with hydroton clay media
- This grow bed will be made of 1/2" welded polyethylene sheets (figure 2)
- The vegetables that will primarily be produced in this phase are as follows: parsley, cilantro and chives. These may vary depending on demand.
- The water from this stage is then gravity fed into a sump tank (the lowest point in the system) from here the water is pumped into a 4' wide by 6" deep by 8' long grow bed (figure 3)
- The system may accommodate several sections of these beds depending on the length of the system.
- Styrofoam rafts will float on the surface of the water suspending the crop allowing the root system to dangle into the underlying water.
- The water from these beds is then gravity fed back into the starting reservoir thus completing the circulation.

Figure 1

