

Please Type or Print in Ink

GAF: Grant Approval Form

RAE# _____

Office Use Only

Date of Board Meeting:

Agenda Item No. _____

 New Grant**Section 1: General Information:** **Continuation**Complete this side for ALL grants, including classroom grantsGrant Start/End Dates: August 2010- May 2011 Application Deadline: May 15, 2009 Grant Amt: \$46,070*Funder's Grant Title: Florida Aquaculture Review Council*Your Grant Title: Facilitating Student-based Aquaculture Research via Outdoor (Greenhouse) Classroom Project-based Activities

*e.g. Weller Teacher Mini-Grant, Building Blocks for Success, etc.

*e.g. *Up, Up and Away, Exploring Our Heritage, Young Galileo's, etc*Grant Writer: Katrin O'Connell, Judy Meksraitis, Effa Beauette School/Dept.Riverview:/Science & CTE Phone 923-1484 Ext 64221Grant Contact Person* Effa Beauette School/Dept RHS: Science/CTE Phone 923-1484 Ext 64322

*This is the school/district-based person who is in charge of the grant.

Schools/Programs to be served by this grant	# of staff impacted	# of students impacted	# of parents impacted
Riverview High/CTE programs in aquaculture & engineering, Cousteau SLC, and Engineering SLC	Approximately 20	Minimally 6 class sections of aquaculture students, as well as all students in marine biology, engineering & environmental science	All the parents of the students impacted

**Does this grant require matching funds? X Yes No If yes, what amount? none
 specific How will these funds be raised? The ARC Council recognizes as matching funds state FTE and CTE funding specifically as that funding supports the hiring of Riverview's Aquaculture teacher, Project Leader, and textbook purchases.

Grant Description

Please type or print neatly in ink. Do not attach separate sheets. Please fill in all blanks. Do not refer to attachments in your summaries.

Briefly summarize the overall purpose/objective of the grant and indicate how this grant will contribute to the needs and goals of your School Improvement Plan and/or District Plan. (Not grant activities)

The primary objective of this grant is to enhance and develop an education research-based program within our large comprehensive high school of 2500 students. The primary vision involves providing hundreds of students with knowledge, skills, technologies, and field experiences basic to a wide variety of marine and freshwater aquatic careers through a curriculum that integrates aquatics, aquaponics, science, math, business, engineering, and communications. The end result would be post-secondary degrees and/or certifications. The vehicle by which this would occur involves the furnishing of an outdoor classroom/greenhouse that will allow for a variety of research-based/hands-on activities. A secondary objective involves collaborating with the public sector through partnerships (i.e. providing internships at Mote Marine's Aquaculture Park, working with community advisory board members, etc.). so as to educate the community regarding the enormous significance of the industry. In addition, such collaboration (i.e. shadowing, speaker's bureau) will lead to increased environmental stewardship, and possibly to student-produced original research considered of value by local organizations, businesses, and universities.

Briefly list grant program activities (what is going to be done with the grant funds):

It is the intent of this 2010-2011 ARC grant proposal that this aquaculture/aquaponics outdoor learning laboratory via a 30" x 72" aquaculture greenhouse. This structure will allow classes in aquaculture, agriscience, marine science, environmental science, chemistry, biology, engineering, and business to collaboratively establish, monitor, and report on a variety of hands-on/research-based aquaculture activities. For example, student activities will include: developing a combined tilapia/vegetable growing system; growing mangroves for community restoration purposes; developing higher-level technologies applicable to filtration and aquaponic systems; breeding ornamentals and researching production techniques; conducting nutrition and health studies; learning how to test water for dissolved oxygen, pH, ammonia and tank inflow; and identifying best management practices.

Please provide a **brief** explanation of pertinent **budget items** that will be funded through this grant. *(Please indicate if funds will be used for new/old staff position, contracted services, travel, materials/supplies, equipment/furniture, facilities, and other applicable items.)*

If awarded, the dollars received would be for the 2010--2011 school year. The project costs involve the infrastructure and furnishing of the outdoor facility/greenhouse. Each growing area will contain five vaults/crypts, with each growing area being filtered by its own recirculation system. The rationale behind this design involves the students' "learning curve". First, the students will work with one area/crypt as they learn how to raise a specific species...and then once they have gained that knowledge they will then expand the growth of that one species to the other four vaults. The same process will occur with the other four areas. In addition to the purchase In addition the quarantine area will allow teachers to educate students regarding security procedures, disease, etc. Understanding that a mix of salt water and freshwater species requires different procedures, the team plans to enhance the education of its students through diversity. The plan is to grow tilapia, loaches, cichlids, sea horses, ornamental and other plants, koi, soft coral, and mangroves.

4. How will grant activities be continued after the end of grant period?

The program should become self-sustaining through FTE and student-marketed products. In addition, the community advisory committee has agreed to assist in the procurement of additional project and partnership related grants.

<i>Linda K. Nook</i>	<i>Linda K. Nook</i>	<i>5/15/09</i>
Print Name of Cost Center Head	Signature of Cost Center Head	Date

Send this completed form and 1 copy of your grant to RAE (Grants Office)

FRONT

OVER

Rev. 06/01/2005

Please Type or Print in Ink GAF: Grant Approval Form				
Section Two: Summary for grants over \$2,000.				
(These grants require School Board approval. GAF must be submitted by the School Board meeting prior to relevant School Board meeting.)				
Fiscal Management will be done by: <input type="checkbox"/> District Finance Office <input checked="" type="checkbox"/> School Internal Account <input type="checkbox"/> Other (name): Education Foundation	<input type="checkbox"/> Entitlement/Flowthrough <input checked="" type="checkbox"/> Competitive/discretionary <input type="checkbox"/> Continuation	Fund Source: <input type="checkbox"/> Federal (indirect cost \$ _____) <input checked="" type="checkbox"/> State <input type="checkbox"/> Local Foundation <input type="checkbox"/> Other:		
Name of Primary Fund Source	Funder's Contact Name	Funder's Address	Phone Number	\$ Amount
State of Florida Aquaculture Review Council (Division of Aquaculture)	TBA	Tallahassee, Florida	TBA	



***NOTE: If TECHNOLOGY is part of this grant:**

A memo, signed by the Cost Center Head must accompany this form. The memo must state that:

- a. The school technology personnel has reviewed the physical capabilities of the area involved and that no additional wiring or electrical will be needed to implement the grant beyond what is provided through grant funds.
- b. The memo must be cosigned by Brad Schuette (927-9000 ext 31351 FAX 927-4015). Please call, tell him about your project, then FAX your memo to him for signature. He will FAX the memo back to you for inclusion with the GAF.



***NOTE: If FACILITY CONSTRUCTION or RETROFIT are part of this grant:**

- c. The memo must be co-signed by Paul Pitcher, (361-6311; fax 361-6318). Please call, tell him about your project, then, if the project is acceptable, FAX your memo to him for signature. He will FAX the memo back to you for inclusion with the GAF.

Thank you. Please call ext 927-9000 ext 32254 with questions.

RAE OFFICE USE ONLY

Section Three: Signatures

RAE personnel will obtain all signatures in this section

Von file

*DISTRICT DIRECTOR OF TECHNOLOGY INFORMATION SERVICES

[Handwritten signature]

RESEARCH, ASSESSMENT & EVALUATION (RAE)

Von file

*DIRECTOR OF FACILITIES SERVICES

Von file

Von file

DIRECTOR OF BUDGET

Von file

*EXECUTIVE DIRECTOR OF ELEMENTARY, MIDDLE, OR SECONDARY

ASSOCIATE SUPERINTENDENT

Linn White

SUPERINTENDENT

*Signatures needed only if applicable.

SEND THIS COMPLETED FORM AND 1 COPY OF YOUR GRANT TO RAE (GRANTS OFFICE)