

**AQUA-SCIENCE SMALL LEARNING COMMUNITY
RIVERVIEW HIGH SCHOOL**
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June 2, 2009

TO: Kal Knickerbocker
Division of Aquaculture
1203 Governor's Square, 5th Floor
Tallahassee, FL 32301

RE: Final report
FDACS Contract #013970
Riverview High School
One Ram Way
Sarasota, FL 34231

Report #1, completed October 1, 2008, presented Riverview's successful progress regarding student enrollment into beginning, intermediate, and advanced aquaculture career technical education courses and the successful integration of those courses into the marine and environmental sciences. Report #2, completed January 1, 2009, explained that Riverview was not only successfully meeting the terms of the ARC grant by ensuring the curriculum development of the aquaculture courses and by the furnishing of two wet-dry labs (Phase 1) but also had expanded the scope of the ARC goals to include the purchasing and partial furnishing of a 30' X 72' greenhouse and 8' X 16' "quarantine" lean-to. The structural design was based on the dedicated team's decisions, in collaboration with its community advisory board, regarding what products to grow (Tilapia, Koi, Cichlids, Loaches, Ornamentals, etc.), the equipment needed to grow those products, and the consequent space required. Report #3, due April 1, 2009, involves addition greenhouse and equipment issues. Those activities involve providing school board personnel with a comprehensive site plan not only showing the placement of the greenhouse (Phase 2) but also the placement of the proposed research facility (Phase 3) and dock (Phase 4). A renowned architect from Sarasota has agreed to donate his services by preparing this comprehensive site plan that will be presented to school board personnel. In addition, a prominent engineer has agreed to donate his services to provide and present to school board personnel "sealed" plans displaying the foundation (with drainage system as recommended by UF Tropical Labs), electrical, and plumbing infrastructure. District personnel has already agreed, without cost, to run conduit to the greenhouse location. So we are pleased to say that we are in forward motion regarding the district and staff collaboratively working to meet the permitting requirements of the greenhouse!

In the meantime, the committed team members have been conscientious in seeking guidance from UF Tropical Labs so as to obtain bids that will allow them to get the "biggest bang for Arc's dollar"! Total funds expended to date (\$39,188.90) debited from the ARC funds awarded (\$48,952.00 after the 4% reduction) include the following:

- (Purchase Order #1): \$ 1,166.00 for food storage and supplies (Invoice sent)
- (Purchase Order #2): \$22,895.80 for 30' X 72' greenhouse with 8' X 16' lean-to (Invoice sent)
- (Purchase Order #3): \$ 7,609.00 for the evaporative wet pad cooling system with fans (Invoice sent)
- (Purchase Order #4): \$ 6,371.40 for two Polygeser Drop filters & 2 UV Sterilizers (Invoice sent)
- (Purchase Order #5) \$ 1,147.10 for one BTU/HR Electronic Ignition Propane Heater (Invoice Included)

(Purchase Order #6): \$6,362.39 for 2 additional Polygeser Drop filters & 2 UV Sterilizers (Invoice Included)
(Purchase Order #7): \$2650.00 SeaScape: aquarium supplies and assorted fish and plants (Invoice to be sent)
(Purchase Order #8): \$750.00 for Materials and Tools to build RAS/Aquaponic Systems (Invoice to be sent)

The ARC grant funds remaining after the above total expenditures (\$48,951.69) total \$00.31.

Three exciting events have happened since Riverview's last report. First, the popular aquaculture classes are "busting at the seams" with student enrollment and participation in extracurricular clubs (FFA, Marine Biology). To accommodate that interest, a fourth aquaculture course will be added called "Directed Studies", a course that will allow juniors and seniors to take the enormous knowledge they have gained from their participation in the first three courses to the next level through applied, project-driven activities. Second, a major goal as per this grant involving students becoming involved in original research and presenting that research has already become a reality. For example, one of the aquaculture students was awarded the Omar Kumar award involving \$2000 scholarship and a mentorship at the Mote Marine Aquaculture Research facility for his innovating Recirculating Aquaculture System/Aquaponics project called "*Let-tuce, grow*". A second student interning at the aquaculture facility who had the rare opportunity to "tag" snook will have his name on a Mote research publication! Both students will be presenting to the Florida Marine Science Educators Association on May 15th, 2009! Third, Riverview staff and students were recognized on May 5th, 2009, by the University of Central Florida and the Sarasota County School Board for staff and student's vision and design of the aquaculture greenhouse! Riverview's project will not only serve as a "model activity" but also staff will be involved in mentoring other schools wishing to participate in the future. ARC has been given recognition for providing grant dollars in this endeavor. Should ARC wish to view the site, it can be accessed via <http://www.sarasota.k12.fl.us/rhs/cot>

In closing, it is amazing what these funds have allowed both staff and students to accomplish. We have far surpassed the goals as specified in this grant, and we have UF Tropical labs and FDACS/Arc personnel to thank as they have provided enthusiastic and ongoing support! We continue to be forever grateful to the Florida Department of Agriculture and Consumer Services and Charles H. Bronson (Commissioner)!

"Funding for this project provided by the Florida Department of Agriculture and Consumer Services, Charles H. Bronson, Commissioner."