

San Diego Unified Port District- Environmental Services
CVESD Coastal Education Program Located at the Chula Vista Nature Center
Progress Report: June 2011

Sent to: Eileen Maher [emaher@portofsandiego.org] **on September 23, 2011**

Work Completed to Date:

On July 28th an Open House was held at the Nature Center for teachers to priority register their classes and put their names into a lottery to win Port funded transportation for their classes to the Nature Center. A new record of fifty-six teachers attended the Open House! Fifteen teachers representing 36.5 classes were able to be awarded free transportation from the Port. The schedule for study trips was almost completely filled that night and in the few days following the open house. Currently there are only five days that are available for classes through Jan. 31st and all are minimum days. There are nine teacher representing 27 classes that wanted to come in the Fall Session but now have to wait until the Spring to come because the schedule filled up so quickly. There is a great demand for the Coastal Education Programs and the major obstacle keeping the students from attending these excellent experiences is the cost of transportation. The desire for teachers to “win” the free transportation is overwhelming. They cheered like they had won the lottery when I chose their name out of the hat.

In August and September six classes were able to come to the Nature Center using the Port funded transportation. Three classes of first graders took part in the “Arthropods All Around” Program and three classes of fourth graders participated in the “Geology Rocks” Program. The first graders learned the difference between insects and arachnids, became imaginary insects, and observed the diversity of this group of animals by looking at a variety of them under microscopes. They learned about some of the adaptations of arthropods, used bug boxes to investigate and then release some of the local arthropods and even got to touch a crayfish. The students that participated in the Geology program got to simulate a variety of weathering and erosion techniques went through the rock cycle as they created edible rocks out of starburst. (Please see photos below)

Last year there were still 5 schools out of the 44 schools in the district that had not attended a Coastal Education Program in the past two years. A special flyer was sent to the teachers of these schools and direct phone calls to the Principals were made to encourage them to come to the Open House and receive free transportation for their classes. (Please see attached flier) Two of those schools had representatives at the Open House and were awarded free transportation. CVLCC and Silverwing are bringing multiple classes from their school this Fall. There are currently still three schools that have not participated in this program in the past two years; Finney, Montgomery, and Otay. There will be another Open House on Nov. 8th and another special flyer will be sent to the teachers of these three schools. Extra effort will be made to contact the principals of these schools and make sure that they understand the opportunity that is available to their teachers. A teacher from Otay is one of the teachers currently on the waiting list so hopefully her classes will be able to attend this Spring.

Already there have been some adjustments to the winners of the free transportation. When the drawing took place at the Open House a waiting list was created in case there were any cancellations or changes. Currently one teacher, representing four classes had to cancel and not use her transportation funding so it was given to the first teacher on the waiting list. This teacher needed less of the money that was available so the second teacher on the waiting list was able to receive partial funding for her trip too. This was vital since she had already mentioned that if they did not receive funding; her four classes were definitely not going to be able to attend. Since they received the partial funding; now all four classes are scheduled to come this Fall.

How effective the project is at benefiting the Bay:

When students come to a study trip they are given a free pass that allows them and one adult to come back to the Nature Center on another day for free. The Nature Center keeps track of these passes and how many people return. From June - August 2011 93 free passes (2 people per pass) have been collected from the Coastal Education Program. Additional 9 adults and 19 children paid to accompany their family members that got in for free. Therefore a total of 214 people have returned to the Nature Center as a direct result of attending one of the Coastal Education Programs. Not only were the students inspired enough to bring their family back, the family then was able to have the opportunity to become inspired by the exhibits and programs during their visit. Overall the entire local family gains a greater respect for their local environment and the flora and fauna living in it. The data for September- November 2011 will be reported in the December progress report.

All 5th grade students took the Science CST during the first two weeks of May. It was the hope that the students improved their science test scores by 5-10% over their results from last year. In 2010 63% of students performed at the Proficient & Advanced levels and in 2011 68% of students performed at the Proficient & Advanced levels; a 5% increase! In 2010 22% of students performed at the Basic level and in 2011 21% performed at the Basic level. This shows that 1% of students went from performing at the Basic level to performing at the Proficient & Advanced level. In 2010 15% of students were performing at the Below Basic or Far Below Basic levels and in 2011 12% of students were performing at the Below Basic or Far Below Basic levels. This shows that some students performing at the lowest levels in 2010 actually went on to perform even better than at the Basic level in 2011; they performed at either the Proficient or Advanced level! Over all the CVESD students perform at higher level than the National Average in Science. In 2011 58% of students nation-wide performed at the Advanced or Proficient levels, 25% at the Basic level and 18% at the Below Basic or Far Below Basic levels. (Please see attached Test Result Summaries: CVESD 2010, CVESD 2011, CA STATE 2011)

The CVESD students increased their overall average score on the 5th grade Science CST from 359.9 to 369.2 between the 2009 and 2010 CST's. The students also increased their average science CST score from 369.2 to 376.7 between the 2010 and 2011 CST's. The national average overall score for the science CST in 2011 was 367.2,

so the CVESD students have scored above the national average. The improved CST scores were due to the hard work that teachers and students have done in the classrooms but with over 5,000 students from the district attending a Coastal Education Program based on the CST standards each year, the impact of these programs absolutely has an effect on the performance of the students on their CST's each year. Again this year 5th grade teachers have reported a significant increase in their students' science CST test scores and they attribute this significant increase to the learning that took place when their students were at the Nature Center. It is the hope that this trend continues and as more students visit and take part in the programs their science scores will continue to improve as well as their respect and understanding of the natural world around them.

The Nature Center is now becoming a popular site for families all over San Diego to visit. The staff has been working tirelessly to market the Nature Center and its programs to the local and county wide populations. There will be a new seasonal exhibit coming this March that will be featuring frogs from all over the world and the threats to all amphibian populations. It is exciting to watch this treasure grow and give more of our local population the opportunity to learn how to be better stewards of our San Diego Bay.

Costs Incurred to Date:

The invoice sent in June was able to include all the costs that had been incurred throughout the remainder of the school year. So far this school year only six classes have attended with the Port funded transportation. The three first grade classes all came on one day on a shuttle that cost \$225. One of the 4th grade classes used a single round trip on a district bus that cost \$155 and the other two 4th grade classes had to use a private company bus that cost \$175/visit(\$175 x 2= \$350) since the district bus was not available. So the total amount incurred to date is \$730(\$225 + \$155 + \$350).

There was \$295 left over from the budgeted \$7,750 for the 2009-2010 year that was going to be added to this year's budget, but instead it will be added to the remaining amount of money that is allotted for Fall Session 2012. Since the three years of funding began for the Winter/Spring Session of 2009, it will end after the Fall Session 2012. The Port's funding of the Coastal Education Program has made it possible for many new teachers and students to have this amazing and eye-opening experience. We look forward to submitting a proposal this year so we can continue to make this experience accessible to all students in the CVESD district. Thank you!

Photos:

**Geology Rocks, 4th Grade
Weathering Activities**



Erosion Activities with Stream Tables



Edible Rocks and the Rock Cycle

