#199

COMPLETE

Collector:	Gimbel Foundat...nd Evaluation (Web Link)
Started:	Wednesday, March 27, 2019 11:04:48 AM
Last Modified:	Wednesday, March 27, 2019 1:32:55 PM
Time Spent:	02:28:06
IP Address:	66.167.108.46

Page 1

Q1 Name of your organization.

Coalition for Clean Air

Q2 Grant #

20170854

Q3 Grant Period

12/1/2017 - 11/30/2018

Q4 Location of your organization

City	**Los Angeles**
State	**California**

Q5 Name and Title of person completing evaluation.

Brian Sheridan, Development Director

Q6 Phone Number:

213-223-6872

Q7 Email address.

brian@ccair.org

Page 2: Key Outcomes and Results

Q8 Total number of clients served through this grant funding:

350

Q9 Describe the project's key outcomes and results based on the goals and objectives. Use the following format:State the Goal:State Objective 1:Describe the Activities, Results and Outcomes for Objective 1:State Objective 2 (if applicable):Describe the Activities, Results and Outcomes for Objective 2:State Objective 3 (if applicable):Describe the Activities, Results and Outcomes for Objective 3:

State the Goal:

Establish a greater understanding of air pollution and its effects among Riverside Unified School District (RUSD) high school students and teachers.

State Objective 1:

Train 15 teachers and 350 students in the CLEAR-In-Schools curriculum and use of technology in the 2017–18 school year.
Describe the Activities, Results and Outcomes for Objective 1:

In spring 2018, Coalition for Clean Air (CCA) partnered with North High School in Riverside, California, to implement the CLEAR-In-Schools air quality monitoring program. This is the second year CCA offered the program at North High.
This funding helped solidify a relationship and leverage resources so that the program continued in the fall of 2018 and spring of 2019 as well.
Activities:
• Delivery of an interactive, thorough set of lessons and activities based on the STEM curriculum and methodology developed by Sonoma Technologies, Inc.
• A total of three teachers (anatomy, physiology, and biology) engaged 55 students in the program.
• On-site workshops for both regular science and AP environmental science classes.
• Students learned how to design their own experiments.
• Students learned how to identify causes of local air pollution.
• Students were empowered to protect public health through behavior change to reduce both air pollution emissions and exposure.
• The CLEAR-In-Schools program manager worked with North High science teacher Lilian McCandless, who was trained in the uses of the technology and methodology behind it in last year's program at North High. Two additional teachers, Cassie Bennett and Ms. Roberts, assisted Ms. McCandless in the implementation of the program.
• Students measured particle pollution (PM2.5) using air quality sensors and interpreted the data they collected, engaging in scientific inquiry, before presenting to scientists from the College of Engineering's Center for Environmental Research and Technology (CE-CERT) at UC Riverside and policymakers.
• Students learned about environmental policy and were given access to policymakers. They presented the results of their investigations and made policy recommendations to local city officials, expert regulators, and policymakers at an assembly on May 25, 2018.
The following officials attended the presentation:
• Dr. Joe Lyou, president and CEO, Coalition for Clean Air and member of the South Coast Air Quality Management (AQMD) Governing Board
• Lana Abassi, field representative, Office of Congressman Mark Takano
• Ron Loveridge, former mayor of Riverside and current faculty member at UC Riverside
• Ben Benoit, Mayor for the City of Wildomar
• Celia Cudiamat, The Community Foundation and S.L. Gimbel Foundation
• Carmen Cuevas, senior field representative for Assemblymember Jose Medina
• Nicole Cleary, Deputy Director, CE-CERT, UC Riverside

Students presented air quality projects on the following research topics: Air Quality and Smoking Restrictions, Causes and Types of Air

Pollution and their Impact on Health, The Effect of BBQ at School on Students, How Air Quality Differs in Relation to Elevation, How Car Emissions Affect Air Quality, How Idling Affects Air Quality in our Community, the Effect of Particulate Matter on Health, and How Air Quality Differs in Time and Across Schools. The following websites were created as part of their air quality projects and have detailed information about the students' scientific inquiry. (The password for each website is: Airpollution18.)

- http://airpollutionprojectgroup10.weebly.com/
- http://airpollution-project.weebly.com/
- http://airpollutionprojectgroup1.weebly.com/
- http://airpollution-anatomy.weebly.com/
- http://pollutionproject0623.weebly.com/
- http://airpollution117.weebly.com/
- http://airpollution103.weebly.com/
- http://anatomy-airpollution.weebly.com/

Results and Outcomes:
Quantitative and qualitative data was collected through pre- and post-surveys administered to student participants.

Pre-surveys taken on March 8, 2018 indicated:
- A high awareness of the negative impact of air pollution on health.
- The majority said everyone is responsible for keeping the air clean.
- 32 percent of respondents were not familiar with the Air Quality Index.
- The majority of respondents did not check the air quality in their area before an activity.
- 30 percent of respondents were unaware of the sources of air pollution in their communities.
- Respondents had some knowledge of careers related to pollution, but 28 percent of the responses were inappropriate (truck drivers, loggers, factory workers, clerical assistants, etc.)
- Respondents had knowledge of actions they could take to reduce air pollution in their neighborhoods (e.g., driving electric cars, driving less, walking or biking, carpooling).

Post-surveys taken from May 29 to May 31, 2018 indicated:
- The majority had increased awareness and knowledge of specific health risks associated with air pollution.
- Nearly 100 percent of respondents said everyone is responsible for keeping the air clean.
- Increased awareness of the Air Quality Index (87 percent). Now, only 13 percent of respondents were unfamiliar with the Index.
- 34 percent of respondents either check the air quality in their area before an activity, or will start doing so. Some respondents will use Purple Air monitors (from the curriculum).
- Close to 100 percent of respondents had an increase in awareness and knowledge of air pollution sources near their schools and in their neighborhoods (cars idling, burning of fossil fuels, harmful particles, gases, etc.)
- Respondents had a significant increase in the knowledge of careers related to air pollution.
- The majority of respondents had an increased number of actions to take to reduce air pollution in their neighborhoods.

Recommendations Going Forward:
CE-CERT plans to continue their partnership in the implementation of CLEAR-In-Schools at North High School. Therefore, CCA recommends enhanced communication and interaction between CE-CERT and the participating science teacher(s) at North High School. Expectations of CE-CERT scientists should also be clarified to improve the collaboration between both science advisers and student participants. We also recommend that CE-CERT scientists make more frequent visits to the school to provide more guidance and feedback to student participants regarding their air quality projects.

CLEAR-In-Schools program manager Victor Polanco also noticed that once the program was underway at North High, other teachers expressed an interest in implementing the CLEAR-In-Schools curriculum. He would like to see increased awareness of the program among RUSD teachers that would enable more district teachers to be trained in the curriculum.

Q10 Please describe any challenges/obstacles the organization encountered (if any) in attaining goals & objectives.

We did not anticipate that North High would end up forming a new partnership with CE-CERT scientists. While we were excited to introduce new stakeholders to the program, it was definitely a challenge to bring CE-CERT scientists up to speed on the goals and objectives for the program. Likewise, we would have loved to have had the scientists interact with the students on a more consistent basis. Nevertheless, we have subsequently seen the partnership grow so that in 2019, a real partnership has formed between CE-CERT, RUSD and CCA both with the continuation of this program and through new opportunities to engage students in air quality monitoring projects.

Q11 How did you overcome and/or address the challenges and obstacles?

Coalition for Clean Air program manager Victor Polanco was flexible with North High School's interest in working with UC Riverside's CE-CERT staff. He carefully observed interactions among CE-CERT scientists, student participants, and the North High science teachers. To overcome the challenge of a more limited engagement of CE-CERT scientists in meeting the goal and objective of the program, the three science teachers made sure the students' air quality projects were completed on time. Additionally, CE-CERT graduate students provided feedback on the students' projects and attended their final presentations where they made additional comments and suggestions.

Q12 Describe any unintended positive outcomes as a result of the efforts supported by this grant.

Following this grant, CCA, RUSD, and CE-CERT continued to work together both to implement our CLEAR In Schools program and on the development of new programs. Pending funding availability, our next program together will use monitors to show the impacts of car idling in real time at area grade schools. Likewise, we are helping to co-locate monitors at RUSD schools to get a better idea of the levels of particulate matter and black carbon.

Q13 Briefly describe the impact this grant has had on the organization and community served.

This grant has had a positive impact on the Riverside community, which has serious air pollution issues that negatively affect residents' health. Since children's lungs and immune systems are still developing, they are particularly at risk for developing adverse health issues related to pollution. This important and much-needed intervention has provided both youth and their families with a greater understanding of air quality and its impact on their health. They now have the knowledge and tools to take actions to minimize their exposure and reduce overall emissions, which will improve both their health and the environment. The program also generated positive social change; in the post-surveys, student participants expressed a commitment to behavior change as well as spreading the word in the community. As a result, Riverside residents will obtain immediate economic and public health benefits from an increase in biking and walking activities by student participants and their families.

North High School is a Title 1 school (majority of students are considered low income). Participation in the program offered an exciting opportunity for these students who rarely have the opportunity to combine real-world scientific study, a greater understanding of public health challenges, increased civic and community engagement, discussion of technical solutions for environmental and public health improvement, and overall stakeholder collaboration. The program helped increase student participants' knowledge of environmental policy by providing them with access to policymakers and coordinating an assembly. Additionally, by introducing students to air pollution careers, CLEAR-In-Schools has the potential to positively influence students to pursue STEM careers.

CCA recognizes that education is the key to achieving true progress in our communities. Providing CLEAR-In-Schools at North High again this year enabled us to carry out our mission and increase our impact on disadvantaged communities that are particularly vulnerable to the air pollution that contributes to climate change.

Page 3: Budget

Q14 Please provide a budget expenditure report. Also, provide a budget narrative that explains how the funds were utilized, what was purchased, what were the expensed items based upon the budget that was submitted.

Line Item Request	Gimbel Foundation	Total
1 Personnel: President and CEO	$1,836	$1,836
2 Personnel: Program Managers	$16,120	$16,120
3 Personnel: Development Director	$492	$984
4 Personnel: Benefits	$5,165	$5,132
5 Personnel: Travel	$637	$2,200
6 Contractor	$0	$20,000
7 Equipment: Sensors	$750	$1,000
8 In-Kind Support from district	$3,000	
9 Overhead	$4,727	
TOTALS:	$25,000	$54,999

Notes
1 Two Policy-Maker Meetings Instead of One
2. Two program managers (Nick Burant and Victor Polanco), extended program (Spring and Fall), increased time to bring on and educate new partner (CE-CERT)
6. Approximate value of Sonoma Tech contract provided through in-kind services from UC Riverside CE-CERT Scientists
7. Airbeam monitors and cell phones
8. Per original grant app, we waived our overhead for this grant (but of course still account for it in the overall accounting).

Page 4: Success Stories

Q15 Please relate a success story:

North High science teacher Lilian McCandless said:

“Our biggest success story is the continuation of air monitoring that is going to take place here at North. The [CLEAR-In-Schools] project built a foundation for us that [will] allow us to move forward and imbed the air monitoring and education into our curriculum for years to come. It’s the type of hands-on and real world science that the new Next Generation Science Standards curriculum is all about.”

Q16 Please relate a success story here:

North High School will continue to offer the CLEAR-In-Schools air quality curriculum for a third year, featuring air quality experiments using handheld monitoring devices. The program will be part of a broader collaboration through a California Air Resources Board (CARB) Community Air Grant. This project will include CE-CERT at UC Riverside and will potentially involve 600 students and up to 25 teachers at the school.

Q17 Please relate a success story here: **Respondent skipped this question**

Page 5: Organizational Information

Q18 Which category best describes the organization. Please choose only one.	**Environmental**	
Q19 What is the organization's primary program area of interest?	**Environment/Environmental**	
Q20 Percentage of clients served through grant in each ethnic group category. Total must equal 100%	African American	**15**
	Asian/Pacific Islander	**5**
	Caucasian	**9**
	Native American	**1**
	Hispanic Latino	**70**
	All Ethnicities	**97**
	Other	**2**
	Unknown	**1**
Q21 Approximate percentage of clients served from grant funds in each age category.	Youth ages 13-18	**98**
	Adults	**2**
Q22 Approximate percentage of clients served with disabilities from grant funds.	**Respondent skipped this question**	
Q23 Approximate percentage of clients served in each economic group.	At/Below Poverty Level	**77**
Q24 Approximate percentage of clients served from grant funds in each population category.	Students	**100**