

Agenda Item: H-1
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Continued Item: No

Board Agenda Item

TO: Air Pollution Control District Board

FROM: Aeron Arlin Genet, Air Pollution Control Officer 

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SUBJECT: Clean Air Ambassadors Program

RECOMMENDATION:

Receive and file an update on the District's Clean Air Ambassador program.

BACKGROUND:

The District has several long-standing programs geared toward reaching schools, teachers, and students throughout Santa Barbara County. District staff attend school science and wellness nights and speak with students, parents, and teachers about the science of air quality and our agency's mission and programs. Teachers and professors from San Marcos High School, Pioneer Valley High School, Santa Barbara City College (SBCC), and the University of California, Santa Barbara (UCSB) regularly invite District staff to give guest presentations to their science and environmental studies classes.

For over 17 years, the District has partnered with the Santa Barbara County Education Office to administer a "Care for Our Earth" grant program for kindergarten through 12th grade teachers who propose innovative air quality and conservation projects for their classrooms. In recent years, the District has offered larger grants for teachers that develop more in-depth air quality curriculum. The District has also provided fun opportunities to engage and teach children about air quality during in-person community events, such as at the Santa Barbara Earth Day Festival and Open Streets festivals.

In 2018, the District began developing the Clean Air Ambassadors program to efficiently reach more classrooms throughout the region. Based on a successful model operated by the San Luis

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Obispo County Air Pollution Control District, our District's program work with local college students in pursuit of science and/or educational degrees, who led the curriculum during kindergarten through 3rd grade classroom visits. District staff along with the Clean Air Ambassadors designed the program to align with the Next Generation Science Standards, which appeals to teachers and benefits students.

DISCUSSION:

Program Implementation

The Clean Air Ambassadors program was launched in January 2019 with four Ambassadors, students from UCSB and SBCC. District staff worked closely with the Ambassadors to develop two lesson plans in the starting phase of the program. The Ambassadors utilized resources and lesson plans used by other agencies as a basis to create their own unique curriculum. Clean Air Ambassadors are trained to present an innovative, interactive curriculum that meets California's Next Generation Science Standards (NGSS). The lessons explore concepts such as pollution and sustainability and promote environmental literacy. Students conduct experiments to explore processes such as global weather patterns and air filtration and learn about ways they can help improve air quality.

The first lesson features Dr. Seuss' book "The Lorax" which demonstrates how air pollution affects people and the environment. As part of the lesson, the Ambassadors teach students about sources of air pollution and the personal actions to help keep our air clean. The reading of "The Lorax" incorporates activities and singing related to the story. The second lesson uses the short story "The Magic School Bus" by Joanna Cole to teach students how air pollution affects human health and how children are more sensitive to air pollution than adults. As part of a pretend school bus ride around the classroom, students conduct an experiment with water filters to learn how filtration works, interact with air quality sensors, and play air-themed games.

Through direct outreach to teachers at elementary schools, the Ambassadors presented the first lessons in April 2019 to three kindergarten classes and one transitional-kindergarten class at Hollister Elementary School in Goleta. The presentations earned enthusiastic reviews from the teachers, and the Ambassadors were invited to return the following school year. The program relies on direct outreach to teachers, recommendations from teachers, and newsletter articles issued by the Santa Barbara County Education Office. Once the lessons are completed, the Ambassadors provide the teachers with an online survey and ask them to introduce the program to two teachers at other schools. This word-of-mouth outreach has generated significant interest in the program at other schools.

Program Successes

With the combination of outreach strategies, a fun and interactive program, and well-trained Ambassadors, to date the program has reached 821 students, 33 unique classes, and 66 lessons since April 2019. The program has received only positive feedback from teachers with all of them asking us to return the following school term. As news of this program reached more teachers, we developed a presentation request form to handle the demand. By fall 2019, our Ambassadors were fully scheduled for six months into the future and two additional Ambassadors were added to handle the volume of school requests.

With additional resources, a promotional video was developed to further promote the program and showcase the Clean Air Ambassador program, the lessons offered, and a testimonial from a teacher. The video was produced in early 2020 by District staff. The bulk of the film production was completed in March 2020 at Benjamin Foxen Elementary School in Sisquoc, prior to school shutdowns due to COVID-19. The video is available for viewing on the Clean Air Ambassadors website (<https://www.ourair.org/clean-air-ambassadors-program/>) and will be shown during the May APCD Board meeting.

The Ambassadors program has been on pause since March 2020, due to school closures and the inability to visit students in-person. The program will restart this summer following the County of Santa Barbara Public Health Department guidance. During the initial phase of the restart, the District will pull together current Ambassadors, as well as recruiting new Ambassadors to prepare for children countywide going back to in-person school. In early August, the Ambassadors will reach out to teachers who have already experienced our program to determine if they are interested in a visit once they are able to have outside visitors in the classroom. The Ambassadors will modify the curriculum and add safety protocols to adhere to school district policies. Students may no longer be able to share materials; therefore, the District may need to purchase additional craft supplies. Furthermore, sanitation protocols must be established and followed by the Ambassadors after each visit. District staff will contact the County Education Office to promote the program and share the promotional video through County Education Office channels and events.

In 2022, the Clean Air Ambassador program aims to finish the development of a third lesson, titled “History of Air Pollution,” which will unite the first two lessons with real world examples of air pollution impacts and how these issues are addressed.

FISCAL IMPACT:

The costs for the Clean Air Ambassador program are included in the Fiscal Year (FY) 2020-21 budget approved by your Board. The cost to implement the program in Fiscal Year 2021-22 has also been included in the draft FY 2021-22 budget. There are no additional fiscal impacts.