Board Agenda Item

TO: Air Pollution Control District Board

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SUBJECT: CalEnviroScreen Model

RECOMMENDATION:

Receive and file an update on the CalEnviroScreen model.

BACKGROUND:

During the past 20 years, the state of California has placed significant emphasis on environmental justice issues with the goal to provide more awareness, resources, and key decision-making for communities that are at a disadvantage, both environmentally and economically.

The California Environmental Protection Agency (CalEPA) tasked the Office of Environmental Health Hazard Assessment (OEHHA) to develop the CalEnviroScreen model to identify communities impacted by multiple sources of pollution and designate communities that are especially vulnerable to pollution based on health and socio-economic factors. The CalEnviroScreen model uses data from state and federal government resources to produce a score for each census tract throughout the state. The score is expressed as a percentile, compared to all other census tracts in the state. According to OEHHA, the census tracts within the upper 25% of scores (75th to 100th percentile) are designated as disadvantaged communities (DACs).

The CalEnviroScreen scores enable decision-makers to craft and implement policies that target the state's most vulnerable communities, such as programs that direct improvements and investments to under-resourced neighborhoods, and regulations that minimize or avoid impacts to communities that already experience a higher pollution burden.

Two fairly recent pieces of legislation, SB 535 (De Leon, 2012) and AB 1550 (Gomez, 2016), established how state agencies should direct funds to low-income and disadvantaged communities. The California Air Resources Board (CARB) uses information from the CalEnviroScreen model when they allocate funds according to these legislative requirements. Therefore, the results from CalEnviroScreen may affect the amount of state funding that Santa Barbara County will receive. OEHHA has published results from three previous versions of CalEnviroScreen; the most recently published results are included in version 4.0.

DISCUSSION:

CalEnviroScreen version 4.0 was released in February 2021 and finalized in October 2021. OEHHA compiles data on various types of pollution, environmental impacts, health concerns, and socio-economic conditions, which they call "indicators" in the model. The indicators are grouped into two categories: pollution burden and population characteristics. Table 1 lists the indicators used by OEHHA in CalEnviroScreen 4.0.

Table 1: Indicators in CalEnviroScreen 4.0

POLLUTION BURDEN	
Exposures	**Environmental Effects**
- Ozone - Particulate Matter 2.5 - Diesel Particulate Matter - Drinking Water Contaminants - Toxic Releases from Facilities - Traffic - Children's Lead Risk from Housing - Pesticide Use	- Solid Waste Sites and Facilities - Cleanup Sites - Hazardous Waste Generators and Facilities - Groundwater Threats - Impaired Water Bodies
POPULATION CHARACTERISTICS	
Sensitive Populations	**Socioeconomic Factors**
- Asthma - Cardiovascular Disease - Low Infant Birth Weight	- Educational Attainment - Housing Burden - Linguistic Isolation - Poverty - Unemployment

CalEnviroScreen version 3.0 had no census tracts in Santa Barbara County that scored in the 75th to 100th percentile. However, in CalEnviroScreen version 4.0, there are now two census tracts that are designated as DACs because they are within the 75th to 100th percentile:

1. Guadalupe (81st percentile) census tract 6083002502 (population 7,573) bordered by Casmalia to the south, Black Road to the east, the Santa Maria River to the north, and the Pacific Ocean to the west;
   o In CalEnviroScreen version 3.0, this census tract was in the 74th percentile;
   o The indicators with the largest increases from version 3.0 to 4.0 are housing burden, low birth weight, cardiovascular disease, diesel PM, and PM2.5;
   o The new indicator, children's lead risk from housing, scored fairly high;
   o The drinking water, cleanup sites and unemployment indicators decreased, while all other indicators basically remained the same.

2. Goleta (77th percentile) census tract 6083003001 (population 5,766) bordered by Atascadero Creek to the south, Maria Ygnacio Creek to the east, Highway 101 to the north, and Fairview Ave to the west;
   o In CalEnviroScreen 3.0, this census tract was in the 51st percentile;
   o The indicators with the largest increases from version 3.0 to 4.0 are diesel PM, toxic releases, unemployment, poverty, cardiovascular disease, pesticides, drinking water, impaired waters, and PM2.5;
   o The new indicator, children's lead risk from housing, scored fairly high;
   o The cleanup sites indicator decreased, while all other indicators basically remained the same.

There are also seven other census tracts in Santa Barbara County within the 65th through 75th percentiles, which are not designated as DACs but are still subject to relatively high economic and/or environmental impacts. These include the lower eastside of Santa Barbara, south Lompoc, and five census tracts in the city of Santa Maria.

The District recently implemented grant and outreach programs that included consideration of the CalEnviroScreen 4.0 scores:

- In August to September 2021, the District implemented the 2021 Clean Air Grants program, with several millions of dollars of grant funds provided for off-road, on-road, marine, and infrastructure projects. We used CalEnviroScreen 4.0 scores during the project ranking process and prioritized projects in locations with higher scores;

- In September 2021, the District launched the Clean Air Rooms Pilot Program for Guadalupe and Casmalia residents. With plans to fulfill a waiting list underway, the program will have distributed approximately 800 HEPA air purifiers in conjunction with multi-lingual outreach about wildfire smoke and health. The District partnered with the City of Guadalupe, the Guadalupe Dunes Center, local schools, and other community groups to promote and implement this program.

In the future, CalEnviroScreen 4.0 data may be used to inform state funding decisions for our region, and also to inform district studies, community outreach, and community engagement efforts, such as deployment locations of low-cost sensors. The District plans to utilize the CalEnviroScreen 4.0 data in our 2022 Clean Air Grants program that will launch this fall.

FISCAL IMPACT:

The staff time associated with use of the CalEnviroScreen model 4.0 within any District programs, including Clean Air Grants and Clean Air Rooms, are already accounted for in the District's FY 2021-22 budget approved by the District Board. There are no additional fiscal impacts.