Oakland Public Workshop on the draft CalEnviroScreen 3.0

September 20, 2016
Oakland Asian Cultural Center
388 9th St, Suite 290, Oakland, CA 94607

The fifth regional workshop on the CalEnviroScreen 3.0 draft in Oakland was an opportunity for the public to learn about updates to the tool and provide comments on these updates. The workshop attracted over 50 participants from local community organizations, universities, industry representatives, and local and state government.

Staff sought comments and suggestions related to the four major components of CalEnviroScreen—exposures, environmental effects, sensitive populations and socioeconomic factors. Comments from workshop participants are listed below. Similar or related comments were consolidated and placed in the most appropriate category.

General comments

- Methodology
    - Weight environmental effects the same as exposures indicators.
    - Preference to add indicators rather than multiplying, similar to the Environmental Justice Screening Method (EJSM).
    - This is an important tool but concerned that there are communities that don't show up in CalEnviroScreen environmental and social indicator data that we know are impacted communities as shown in the Bay Area Air Quality Management District's (BAAQMD) CARE Program maps.
    - Has OEHHA looked to find natural breaks in the data?
    - OEHHA should identify important individual indictors and rank census tracts based on these indicators separately.
    - A problem with OEHHA's method is that it depends on cumulating scores for multiple indicators. However, some tracts should rank highly based upon a single important indicator. Scoring shouldn't be based solely on cumulative scores.
- Changes in the Bay Area
    - Out of the 171 Bay area communities that we know face heavy environmental toxic burdens, only 51 of these communities show up as disadvantaged through CalEnviroScreen.
    - Has OEHHA done an analysis of why there were changes in the Bay Area census tracts? Since populations are decreasing in many areas (due to rising rents, gentrification, etc.), these are no longer represented as strongly as they were. However, these communities are still disadvantaged.
    - A number of Bay Area census tracts that were in the top 25% in CalEnviroScreen 2.0 dropped out of the top 25% in 3.0. Why did this happen?

    - It doesn't make sense that census tracts in West Oakland and Berkeley got lower scores and dropped out of the top census tracts. These are still highly disadvantaged communities.
    - How will you address areas of the state that are disadvantaged communities and are not showing in CalEnviroScreen?
- Regional analyses
    - Would like to see regional versus statewide measures of data. The BAAQMD has air quality modeling for the district but would need for the entire state.
    - Regional issues matter. Add regional issues.
    - Is there any consideration for making regional maps?
    - Regional ranking would help CalEnviroScreen be more objective.
    - On a statewide basis, the Bay Area will never compete with Los Angeles or the Central Valley in terms of socioeconomic rankings. OEHHA should consider doing regional rankings; see the Strategic Growth Council for examples of regional socioeconomic analysis.
    - Statewide maps not great for all purposes. Can OEHHA provide guidance to do regional maps? This would be helpful to us.
- Would like to see a new sensitivity analysis for CalEnviroScreen 3.0?
- CalEnviroScreen 2.0 vs 3.0
    - Can you post side-by-side maps of CalEnviroScreen 2.0 vs. CalEnviroScreen 3.0?
    - OEHHA should explain what caused the status of some census tracts to have changed between the two versions.
- CalEnviroScreen needs to decide on a score cutoff, above which a population would be considered vulnerable, instead of using the top percentage of affected communities.
- Important to also discuss how CalEnviroScreen will be used in funding decisions.
- "Ground-truthing" can be used to more accurately assess some communities.

New Indicator Ideas

- Consider oil/gas/fracking sites. Proximity to oil and gas development.
- Age of housing not considered either. EJSCREEN (USEPA) has that info at the census block level, info given by American Community Survey (ACS).
- Climate change
    - Sea level rise (climate change); consider areas prone of sea level rise.
    - Are you considering heat island effect and climate change? Suggest adding this as indicators.
    - Greenhouse gas emissions.
    - General comments to include climate change indicators.
- Commercial and military aviation - i.e., private companies have the opportunity to use military and commercial airports (e.g., Hayward, Livermore, Orinda, Oakland airports) and goods movement. Also concerns about airplanes dumping fuel for landing.
- Fine particulate matter data is available regionally.

- Lead
    - Lead in drinking water at the tap.
    - Lead dust and paint from old housing stock (Bay area has a lot of old housing stock).
    - Soil contamination. Urban farming in Oakland needs to be done on raised beds because soil is too polluted with lead.
    - Lead poisoning would be a good indicator.
- Facilities of interest under AB 32 (e.g., smaller facilities).
- Ultrafine particles.
- Odor pollution.
- Many comments on inclusion of a cancer indicator.
- How could homelessness be measured? Or people who are almost homeless?
- Housing and transportation
    - Consider using work-commute length as a socioeconomic measure.
    - Housing and transportation costs.
    - Homeownership costs could be another indicator in addition to rental costs.
- Cost of living should be included.

Rent adjusted income indicator

- We were concerned about the score for Bayview in the last version of CalEnviroScreen, so we really appreciate the addition of the rent burden indicator.
- Recommendations to consider adding a cost of living adjustment on the residual income piece.
- Rent burden is not a good socioeconomic indicator; not used by other experts or agencies; OEHHA should look at Housing and Urban Development (HUD) methodology.
- Better to look at percentage of income spent on housing; rent burden.
- Should add homeowner burdens
    - How did OEHHA weight the rent-adjusted income indicator?
    - Was there any consideration of home ownership versus the rental population?
    - Would it be possible to include homeowners, not just renters?
- How does OEHHA deal with highly correlated indicators? For example, rent-adjusted income is likely correlated with other measures of poverty. If you control for correlation, you'll obtain different results.

Comments on the removal of the age indicator

- Age indicator did not have a strong link to pollution vulnerability, especially in elderly people. Good idea to remove the age indicator.
- Support for supplemental data on age like a pie chart for the age distribution.
- Would like to see an analysis of the age data that includes:

    - Correlation between the number or percentage of children under age 10 correlated with pollution
    - Correlations with the number of children under age 5 and other indicators
    - Impacts of the removal of the age indicator on the model
- If the level of children correlates strongly with other socioeconomic indicators, why not keep it in the CalEnviroScreen scoring?
- When you look at climate adaptation, you look at vulnerability, and that includes age. We use the age indicator in the current tool because if you have a lot of kids and elderly people they are the most vulnerable to heat, and you may need a cooling center there. You might miss that without the age indicator.
- Comments on adding a childhood poverty indicator and an elderly poverty indicator

Exposures

- Issues of weighting
    - The weight of the different indicators can be an issue. Ozone less toxic than PM2.5 but weights the same.
    - Toxic Releases should be weighted higher than air exposures.
    - Why do we use both Diesel PM and Traffic Density? Concern regarding the overlap.
    - We are weighing Ozone, PM2.5, and Diesel PM the same when PM2.5 and Diesel PM are more of a health hazard.
- Pesticides
    - Concern over pesticides sprayed in housing developments or within homes (especially inner city housing tracts); this should be included.
    - Urban pesticides – urban exposures are higher than agricultural exposures.
- Concern that refineries are not being counted, or not counted enough.
- Do idling vehicles capture congestion (in the traffic density maps)?
- Regarding Diesel PM, the data is finer grained versus Ozone and PM2.5, which is not.
- Concerned about the age of the data used. More recent data would be better.
- The I-880 corridor has changed and expanded, and consequently communities around this corridor have changed. We are being impacted by things we haven't experienced before.
- Would like to see a scenario that looks at counting emissions activities versus concentration.
- Suggestion to include access to groundwater/drinking water as an assessment to capture communities that may have limited access to drinking water due to shrinking aquifers.
- Does water pollution indicator take into account if people are drinking the water or not?

Environmental Effects

- Sites at the old Army base have not been cleaned up in West Oakland. Is this included?

- Look at greenhouse gas emitting facilities separately than others.
- Refinery areas don't seem to register on the maps.
- Use the California Emission Inventory Development and Reporting System (CEIDARS) to capture light industry emissions.
- Suggestion to increase the weight of the score given to composters, as currently they are weighted less than traditional landfills but still greatly impact the local community.
- Suggestion to capture impacts of people entering polluted areas and then spreading the impacts once they return home. For example, people traveling to the Bay, fishing, and then returning home to feed their family the fish.
- Weighting environmental effects the same as exposures indicators:
    - Suggestion to weight the environmental effects equally to exposure instead of the current half weight. Reasoning is that there is good location data for the environmental effects that capture the neighborhoods that are impacted by hazardous waste facilities and cleanups, while the exposure effects rely on monitoring networks that may miss these localized impacts.
    - Your process to count environmental effects for half weight does not appear scientific, it's more arbitrary.
- Port of Oakland pollution not considered by city. How do you consider the pollution from the port? Significant impact with truck and trail traffic. No mitigation or planning done.
- Toll booths on the Bay Bridge (study done by CDPH) show lots of pollution. That pollution comes back to Oakland.
- Do you consider the efforts made by the local community and/or city planning for cleanup or remediation?

Sensitive populations

- Cardiovascular disease indicator
    - Concern that the cardiovascular indicator is not robust enough.
    - Concern that the cardiovascular indicator may just reflect elderly people rather than overall health vulnerability.
- Distance to emergency departments (EDs)
    - Concerned that CalEnviroScreen is not capturing some asthmatics who live far from hospitals so they don't go to EDs when they have an attack. Would like to see how proximity impacts the data.
    - Do the cardiovascular and asthma indicators correlate with distance to the nearest emergency department?
- Childhood asthma rates would be a stronger indicator than the current indicator of overall asthma rates.

Socioeconomic Factors

- Socioeconomic measures should be aligned with or consistent with HUD standards.
- Socioeconomic factors should be weighted more heavily than the other indicators. Comments that it is the most important factor.
- How has the African American community responded to the linguistic isolation indicator?
- More recent data should be used.
    - Since the data is from 2010 to 2014, is OEHHA concerned about not having more recent data since there have been so many changes in the past couple years (especially with gentrification and rent increases)? Is there a way more recent data could be captured?
    - Bay Area socioeconomic conditions changing rapidly; 2010-2014 data may not capture current situation adequately.
- Race should be included.
    - It is very important for the use of this tool. The absence of race delegitimizes the tool because the other indicators may not provide a true representation of vulnerability.
    - Several commenters expressed their support for including the analysis of race/ethnicity and feel that it is very important.
- In addition, the Brookings Institute has some better methods for socioeconomic analysis. Can OEHHA look into this?
- Important to properly analyze tracts dominated by unusual populations such as students or incarcerated populations to avoid artifacts.
- Gentrification issues
    - Impoverished Bay Area census tracts are not adequately captured by CalEnviroScreen 3.0; gentrification is a big issue.
    - Recent gentrification of many poorer neighborhoods can hide problem census tracts; skews the analysis. Such tracts have both high income and low income/disadvantaged populations.
- Population density is important to capture and account for.
- In East Oakland, commercial/industrial areas also have some residential housing that might be missed.
- In the Bay Area, linguistic isolation can sometimes be associated with high income populations that may create artifacts.
- Using only percentage measures of disadvantage can be misleading; absolute numbers of people are also relevant.
- OEHHA could use less reliable census data (e.g., at the census block level) if it also did some “ground-truthing” on the data.