



CalEnviroScreen 4.0

April 28, 2021 | Spring 2021 RTOC

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Office of Environmental Health Hazard Assessment





What is CalEnviroScreen?

UPDATE TO THE CALIFORNIA
COMMUNITIES
ENVIRONMENTAL HEALTH
SCREENING TOOL:

CALENVIROSCREEN 4.0

PUBLIC REVIEW DRAFT



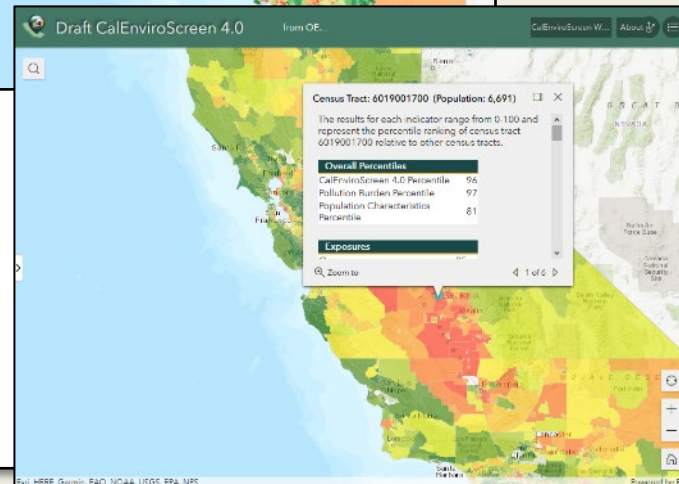
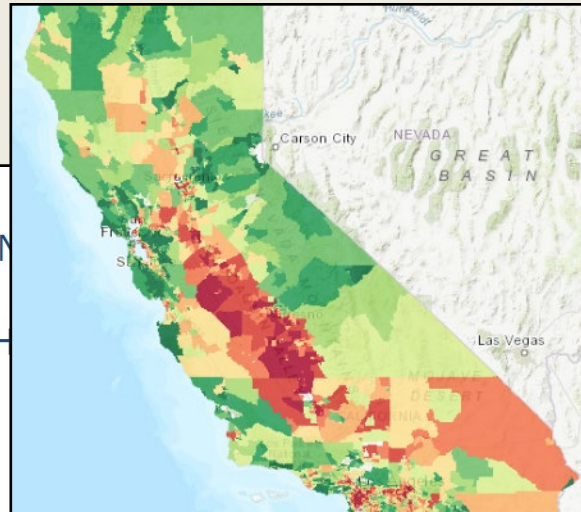
February 2021



California Environmental Protection Agency





















Office of Environmental Health Hazard
Assessment



- Mapping tool that helps identify California communities burdened by multiple sources of pollution and population vulnerability
- 21 indicators combined into a single score
- Census tract scale
- The draft of CalEnviroScreen 4.0 was released for public comment in February

Draft CalEnviroScreen 4.0 Indicators



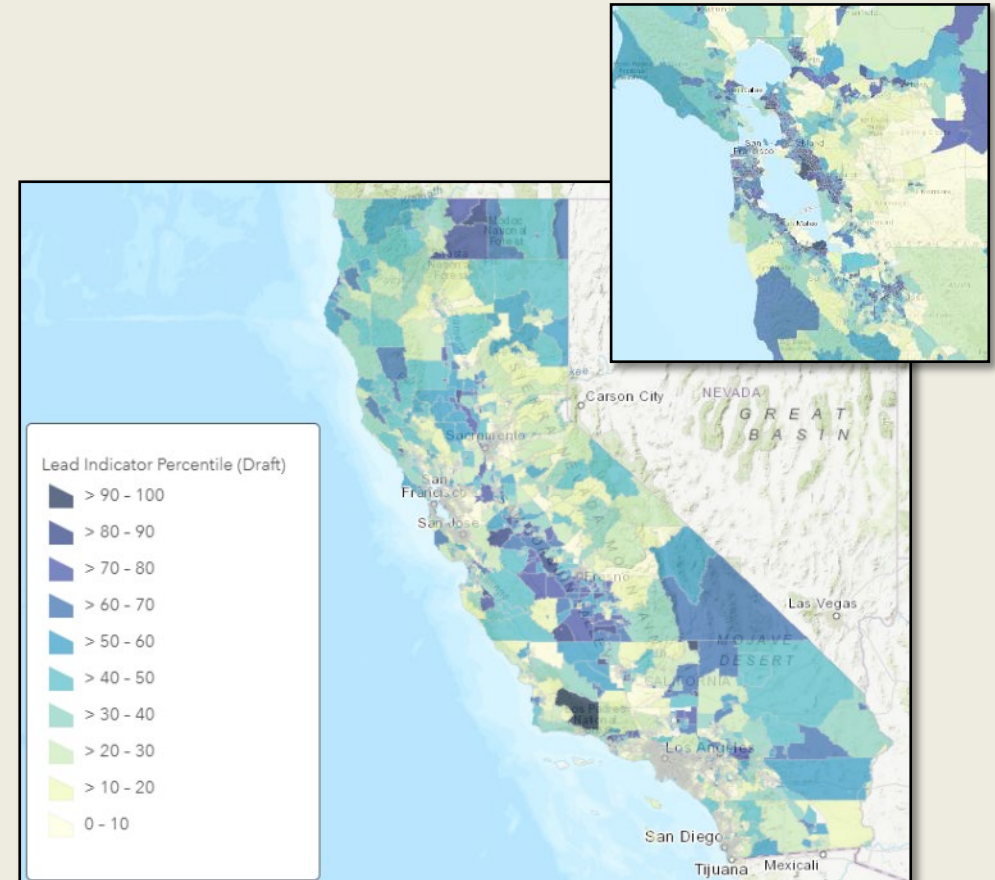
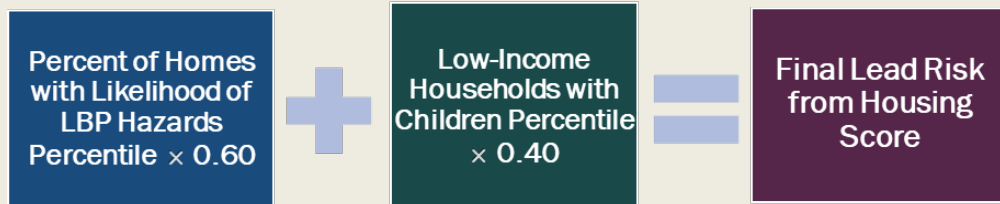
Pollution Burden		Population Characteristics	
Exposures	Environmental Effects	Sensitive Populations	Socioeconomic Factors
 Ozone	 PM2.5	 Solid Waste Sites and Facilities	 Cleanup Sites
 Diesel Particulate Matter	 Drinking Water Contaminants	 Groundwater Threats	 Cardiovascular Disease
 Toxic Releases from Facilities	 Traffic	 Impaired Water Bodies	 Linguistic Isolation
 Children's Lead Risk from Housing	 Pesticide Use	 Hazardous Waste Generators and Facilities	 Poverty
		 Low Birth Weight Infants	 Unemployment

New



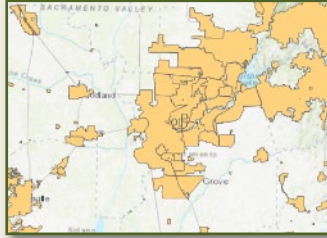
New Indicator: Children's Lead Risk from Housing

- Lead house paint remains the most significant source of lead exposure in children.
- Other sources of environmental lead exposure are already included in CalEnviroScreen (Toxic Releases, Drinking Water, Cleanup Sites, and Hazardous Waste).
- The indicator incorporates two measures of known risk factors: age of housing and low-income households and focuses on the vulnerable population - children.



- The indicator identifies communities that have the highest potential for lead exposure due to old housing.

CalEnviroScreen 4.0 Indicator Updates



Updated contaminants and service boundaries for the **Drinking Water** indicator



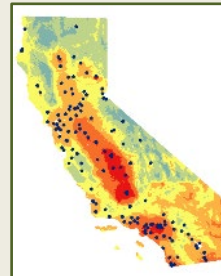
Incorporation of additional pesticides in the **Pesticide Use** indicator



Addition of dairies and feedlots to the **Groundwater Threats** indicator



Addition of chrome metal plating facilities to the **Hazardous Waste** indicator



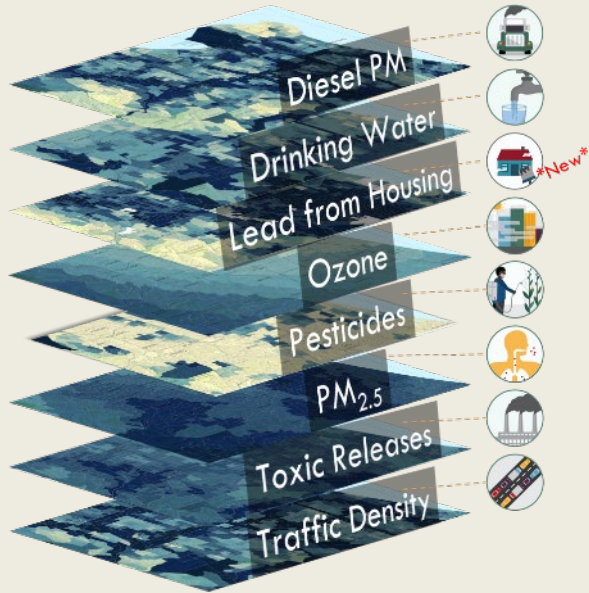
Improvements in the methodology for **PM 2.5** and **Diesel PM** indicators



Incorporating Tribal specific data

CalEnviroScreen Model

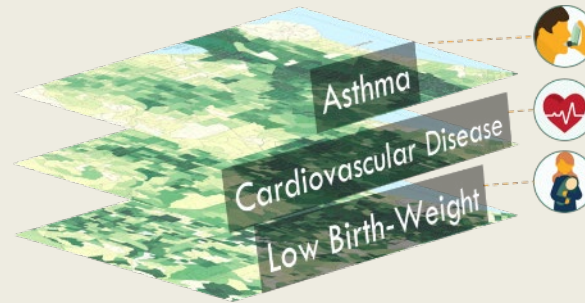
EXPOSURES



ENVIRONMENTAL EFFECTS (1/2)



SENSITIVE POPULATIONS

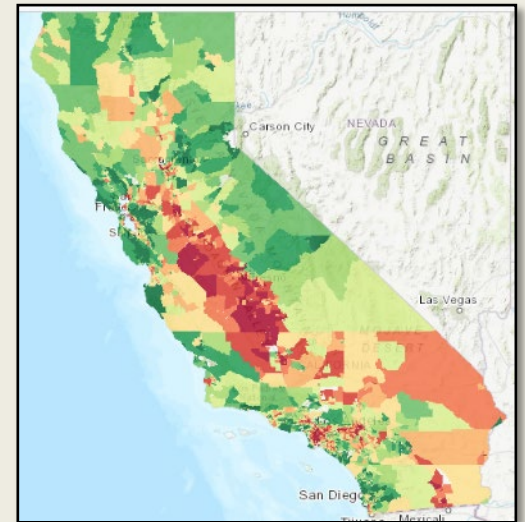


SOCIOECONOMIC FACTORS



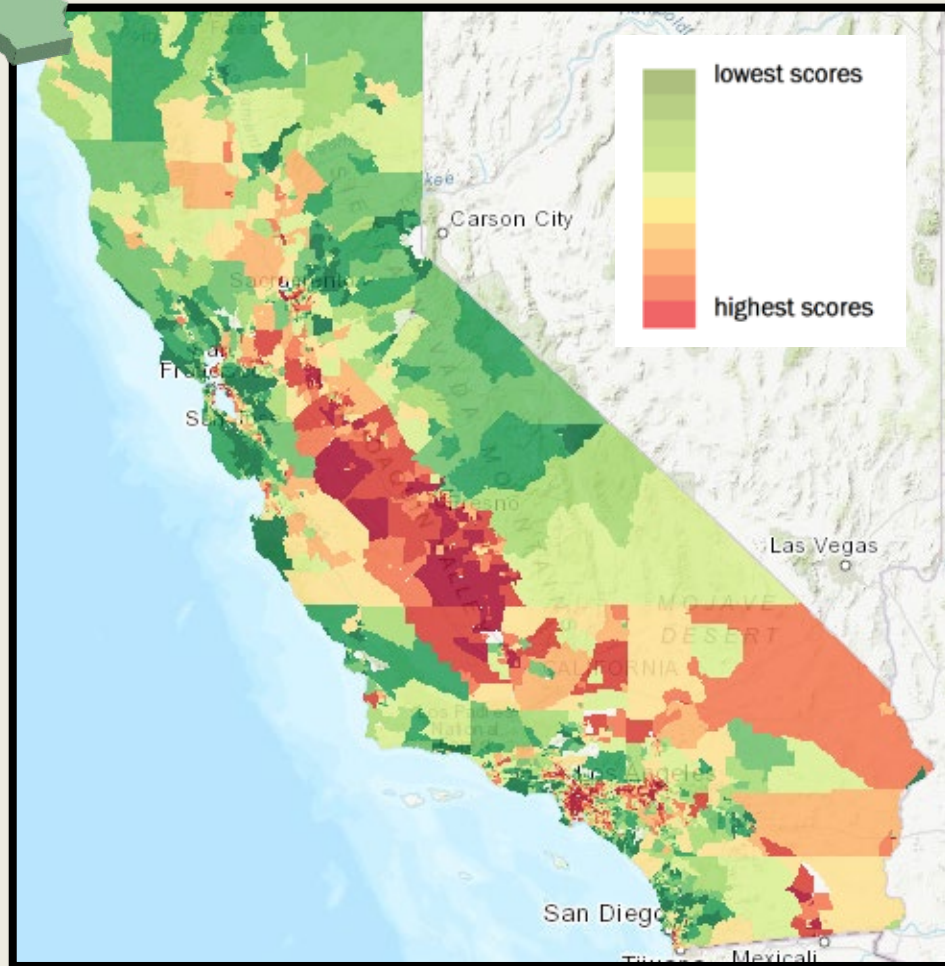
Pollution Burden

Population Characteristics





Overall Draft CalEnviroScreen 4.0 Results

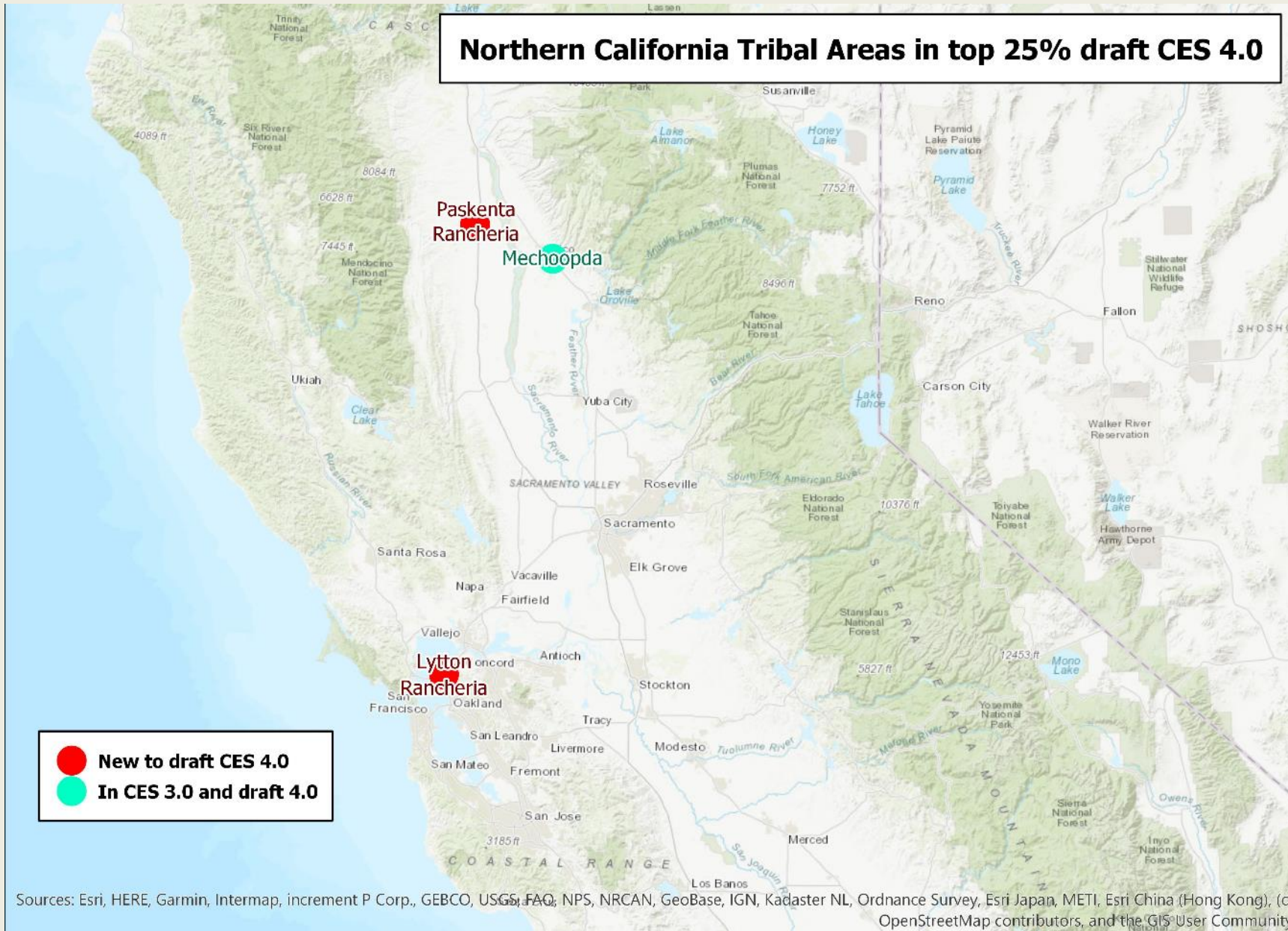


The overall pattern of CalEnviroScreen scores from green to red look very similar to CalEnviroScreen 3.0 results.

Within the highest scoring 25% census tracts, there is a high level of similarity (86%) between versions.

Within the top 25%, an additional five federally recognized tribal areas are identified, compared to the six identified in CalEnviroScreen 3.0, for a total of 11 tribal areas.

Northern California Tribal Areas in top 25% draft CES 4.0



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

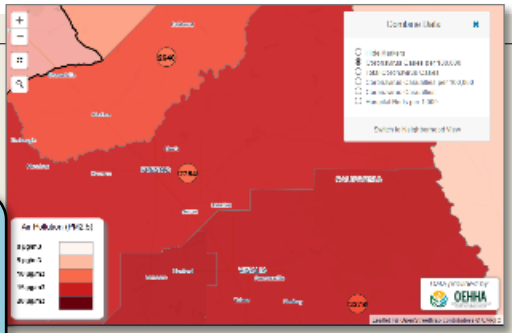
CalEnviroScreen Uses

External grant & investment programs

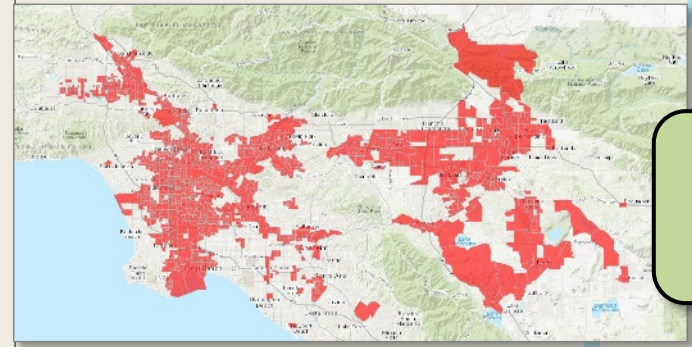
CalEPA grant & investment programs

Research initiatives

EJ in City/County General Plans (SB 1000; 2016)



Disadvantaged Communities (SB 535; 2012)



Community Air Protection (AB 617; 2017)

AB 617 ELEMENTS • Focus on Community Action

- Community emissions reduction programs
- Accelerated retrofit of pollution controls on industrial facilities
- Community-level air quality monitoring
- Enhanced emissions reporting
- Increased penalty provisions
- Grants to local community groups

Uses In Government Statutes

Hazardous Waste Facilities (SB 673; 2015)

Local Resident – 30% of journey level hours	Tier 1 Local Residents and Tier 2 Local Residents.
New Apprentice – 40% of apprentice hours	A Local Resident who first enrolled in a state-registered apprenticeship program at time of commencement of Project Work, or within 12 months prior to commencement of project work.
Tier 1 Local Resident	A person residing in the City of Fresno and in the top 5% of disadvantaged communities per CalEnviroScreen 2.0. (See attached map.)
Tier 2 Local Resident	A person residing in Fresno County or Madera County and in the top 5% of disadvantaged communities per CalEnviroScreen 2.0. (See attached map.)

Cal. Climate Investments Administering Agencies



A model for other regions



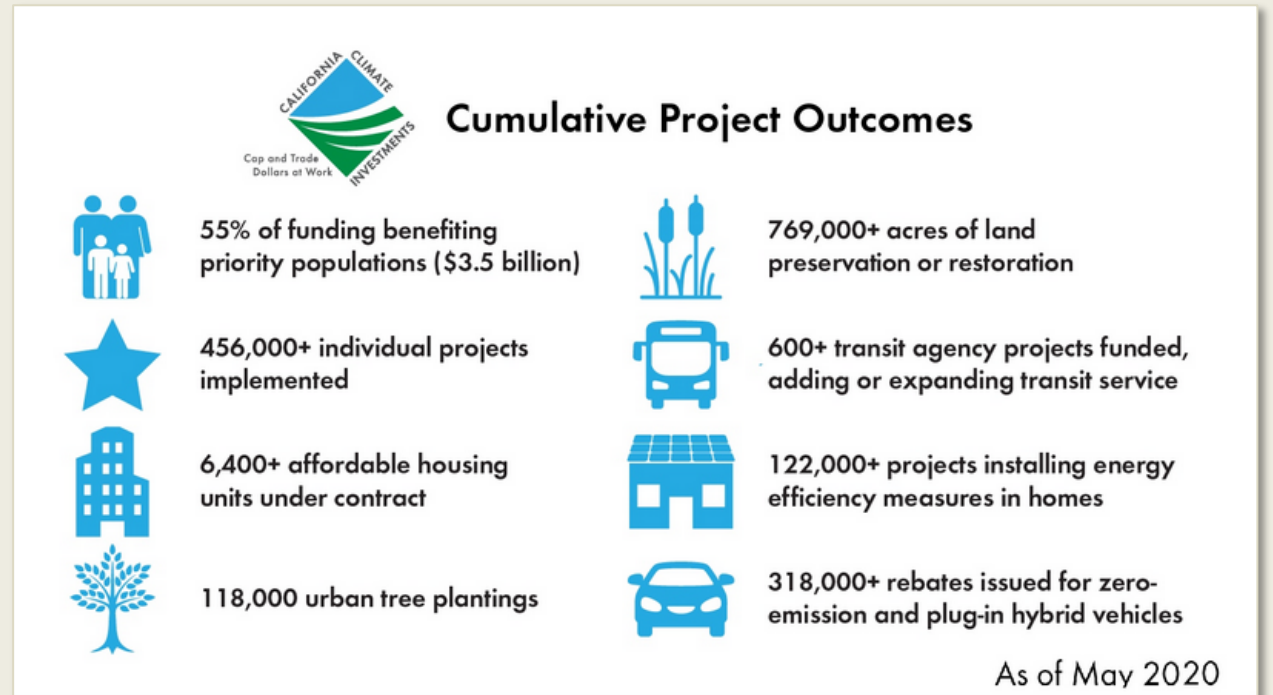
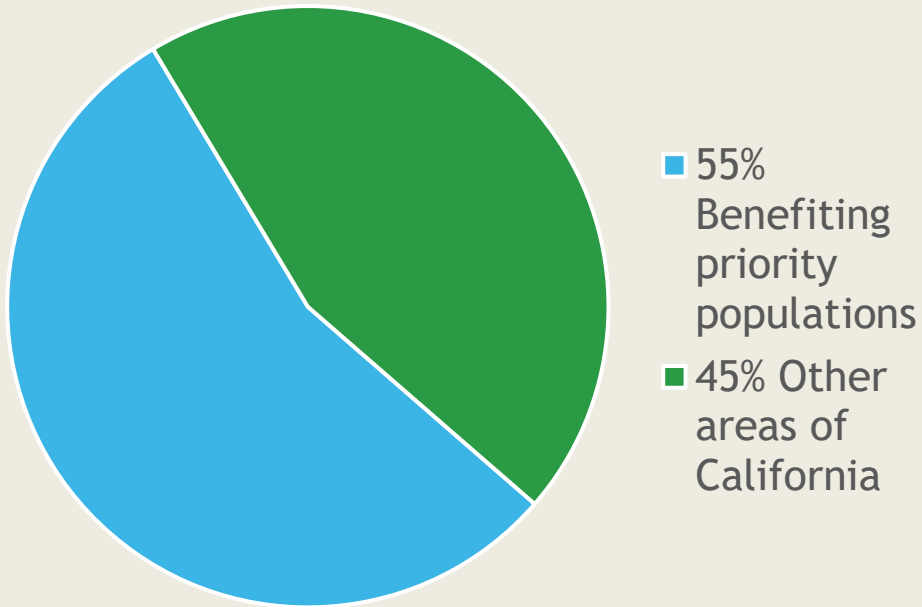
Prioritizing hiring

Other Uses

Identification of Disadvantaged Communities

SB 535 & AB 1550 Outcomes

\$3.5 billion benefiting priority populations (55%)
includes disadvantaged communities



Discussion Questions

How can we better fill in tribal data gaps?

- For indicators already in CalEnviroScreen?
 - Examples: drinking water monitoring data; open dumps on tribal lands
- New tribally relevant indicators?
 - More relevant health, environmental or socioeconomic data?
- What can this process look like?

How can CalEPA identify tribal areas eligible for investment opportunities (as disadvantaged communities)?

- The top 25% using the draft CalEnviroScreen 4.0 includes 11 federally recognized tribes
- Should all tribal areas be considered disadvantaged?
- Or what criteria should be used?
 - Income, other?

Ways to comment on the draft:

- Give a comment or feedback today
- Submit comments online:
<https://oehha.ca.gov/comments>
- By email to
CalEnviroScreen@oehha.ca.gov
Laura.August@oehha.ca.gov
- Or mail to



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Deadline for public comment
Friday, May 14, 2021