The Honorable Brenda Mallory, Chair  
Council on Environmental Quality  
Executive Office of the President  
Washington, DC  20500

RE: Recommendations for the Climate and Economic Justice Screening Tool

Dear Chair Mallory:

We commend the hard work and deliberative process undertaken by the Council on Environmental Quality (CEQ) to create the Climate and Economic Justice Screening Tool (CEJST) to enable federal agencies to identify communities “that are marginalized, underserved, and overburdened by pollution” and to guide prioritization of investments for Justice40 initiatives to address environmental justice challenges across the United States.1 The WHEJAC takes seriously our charge to provide advice and recommendations on the CEJST as CEQ revises the tool in anticipation of its Version 1.0 release and updates and improves the CEJST as new data become available. Ensuring the accuracy of the CEJST and improving the Tool, as new data become available, will be critical to the successful and equitable implementation of Justice40. Accordingly, CEQ will need to commit sufficient funding and staff resources to this iterative process, and provide communities, particularly rural communities and Tribes, capacity-building support that ensures that they can fully benefit from this unprecedented federal initiative.

The following recommendations are based on our review of the February 2022 public beta form of the CEJST, as well as on feedback from our communities and constituents across the country.

1. **Integrate indicators of structural racism.**

The CEJST does not include race as an indicator of a disadvantaged community.2 However, decades of environmental justice research justify the inclusion of *structural racism* metrics in the tool. Examples of such measures include:

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A. **Redlining.** Historical redlining\textsuperscript{3} is a well-documented discriminatory and illegal practice that research shows continues to exert adverse environmental and health impacts on redlined neighborhoods, including worse air quality,\textsuperscript{4} a lack of greenspace,\textsuperscript{5} and higher heat island risks,\textsuperscript{6} as well as elevated rates of cardiovascular disease,\textsuperscript{7} asthma hospitalizations,\textsuperscript{8} poor birth outcomes,\textsuperscript{9} and other diseases.\textsuperscript{10}

B. **Segregation.** Racial residential segregation has been significantly driven by discriminatory political, social, and economic forces,\textsuperscript{11} coupled with patterns of industrialization and disinvestment that have segregated people of color into neighborhoods, including immigrant enclaves. Although these communities have developed strong foundations of socioeconomic resiliency and cultural vibrancy, they often have some of the poorest indices of environmental quality. Accordingly, CEQ should consider including segregation metrics into the CEJST that account for: (1) dimensions of evenness, which measures the degree to which the proportion of a particular racial or ethnic group living in a census tract approximates that group’s relative percentage of an entire county or metropolitan area; or (2) isolation and exposure, which assesses the extent to which a member of a particular racial or ethnic group is likely to have contact with members of the same group (isolation) or, conversely, the degree to which different groups would be exposed to one other by sharing common tracts (exposure).

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Segregation measures should include residential segregation and, if data are available, also include school-based segregation (K-12).

C. **Racialized disparities of extreme wealth and deprivation.** The Index of Concentration at the Extremes measures the extent to which a census tract’s residents are concentrated into groups at the extremes of deprivation and privilege: a value of \(-1\) means that 100\% of the population is concentrated in the most deprived group, and a value of 1 means that 100\% of the population is concentrated into the most privileged group. This measure has been used to characterize tracts in terms of their concentrations of low-income people of color versus high-income white persons in relation to air quality (levels of black carbon) and other health outcomes.

D. **Foreclosures.** Mortgage foreclosures resulting from historic and ongoing racially discriminatory lending practices disproportionately affect home owners of color,\(^\text{12}\) particularly Black residents living in segregated neighborhoods.\(^\text{13}\) Foreclosures have also been shown to be associated with detrimental effects on community health\(^\text{14}\) and poor environmental quality.\(^\text{15}\) Proprietary data sources, including CoreLogic,\(^\text{16}\) have excellent data on this measure (defined as the final transfer of a foreclosed property deed to a new owner), and it is likely that the Treasury Department, Department of Housing and Urban Development (HUD), or Department of Justice might be tracking this information systematically across the country in ways that could be used in the CEJST.

2. **Include relevant indicators of Native American and tribal land.** Research shows that land dispossession and forced migration have displaced Indigenous peoples to lands that are more exposed than their original lands to climate change risks and other environmental hazards.\(^\text{17}\) Currently, the CEJST “covers all U.S. census tracts, including those located within Tribal Nations, to the extent that data is available.”\(^\text{18}\) The CEJST states that decisions regarding the inclusion of tribal land will be informed through “consultation and

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coordination with Tribal Nations.”

We encourage CEQ to follow through with this critical consultation process and to ensure that the WHEJAC Indigenous Peoples and Tribal Nations Workgroup is actively engaged in these deliberations. In addition to depicting federally recognized tribal land, the CEJST should include other associated federally recognized land (trusts, restricted fee, or mixed ownership), as well as state recognized tribal lands, Hawaiian homelands, and traditional hunting and fishing treaty areas. Data sources on tribal land census tracts are available from the U.S. Census Bureau, including the American Indian/Alaska Native/Native Hawaiian Areas National Shapefile, which contains shapefiles for federally recognized American Indian reservations and off-reservation trust land areas as well as state-recognized American Indian reservations. The shapefile includes data such as the Oklahoma Tribal Statistical Areas, Tribal Designated Statistical Areas, and State-Designated Tribal Statistical Areas. It is important to acknowledge that many tribes retain jurisdiction over treaty areas and ancestral homelands, including remaining allotment lands, even though these are often held as private, nontribal trust land. Data sources that depict the impact of land dispossession and forced migration of Indigenous people are available online and could potentially be used to augment this element of the CEJST.

For Indigenous peoples, it is not always true that simply displaying more data or making data more publicly accessible is automatically beneficial. Some information in the CEJST may interfere with ongoing legal disputes and other territorial conflicts in which some Indigenous peoples are embroiled. Or information displayed in the CEJST could trigger other sensitive cultural, social, and political issues with which some Indigenous peoples are grappling. Even though the data in the CEJST tool are already public, the data gain further visibility when curated in the tool. The increase in visibility is not always an unalloyed good for some Indigenous peoples and can pose risks and threats. This is why adequate consultation and feedback is needed to know whether and how the CEJST can have beneficial relevance for Indigenous peoples.

Given that for many Indigenous peoples the CEJST tool does not feature relevant data, Indigenous representatives, leaders, officials, managers, and staff members may question how they can use the CEJST tool. A consultative and feedback process for Indigenous peoples must be orchestrated in a way that does not run afoul of known guidance for engaging Indigenous peoples, including the avoidance of overwhelming Indigenous people with requests for consultation or feedback with little offer of capacity-building support to ensure meaningful participation. For the CEJST tool to be effective, it has to be able to be used in combination with what Indigenous peoples know about their own communities and lands. It has to be a tool that is worth the time of Indigenous persons who already wear many hats in order to manage multiple jobs, programs, and responsibilities, given the dearth of overall needed support for Indigenous peoples in the Justice40 investment areas. There should be

19. Ibid.
20. See, for example, the Native Land Research Initiative. https://www.nativelandresearch.org/.
additional opportunities and resources for Tribal officials as well as the staff of Indigenous organizations and community representatives to undertake consultative and participatory activities that can supplement the CEJST with Indigenous data, information, and knowledge (such as Indigenous traditional ecological knowledge) of relevance to Justice and other initiatives that the CEJST serves.

3. **Address missing income data and ensure that the low-income threshold is not prioritized over all other indicators in a way that precludes DAC designation when thresholds for other indicators are met.**

Income data may not be available in some census tracts with small numbers of residents, particularly tracts in rural areas. For tracts missing income data, we recommend that CEQ undertake income imputation by using income information from neighboring tracts. Alternatively, census tracts that are missing income data and therefore cannot be assessed for disadvantaged community (DAC) status but that are surrounded by tracts with a DAC designation could simply be categorized as DACs. We also recommend reducing the higher education and income thresholds so as not to exclude tracts that house Historically Black Colleges and Universities. In addition, we believe that there may be opportunities to use a more parsimonious and consistent set of metrics for income and education. Currently, the CEJST uses two separate education variables ("high school degree attainment" and "enrollment in higher education") and three different variables to measure income ("low income," "poverty," and "median household income"). Further, consideration should be given to providing a pathway for communities that would qualify as disadvantaged were it not for the income requirement. Such a pathway might be appropriate since these communities could be environmentally and socially burdened in ways that still justify DAC classification.

4. **Enhance the climate change vulnerability category.**

Current indicators used to assess climate change vulnerability in the CEJST are limited to expected agricultural loss, building loss rate, and expected population loss rate. However, there are additional high-quality national data related to other climate change impacts that would make this category more robust. Other elements of climate change vulnerability that are critically relevant to environmental justice include heat island risks, which disparately affect environmental justice communities. Studies show, for example, that the adverse perinatal effects of heat waves combined with poor air quality can disproportionately impact people of color. Metrics could assess trends in the number of extreme warm degree days or nights (e.g., number of days that daily or nightly dry-bulb temperatures exceed the historical [1971–2000])


summertime 99th percentile), neighborhood green space,\textsuperscript{23} tree canopy,\textsuperscript{24} and impervious surface (using USGS National Land Cover Database\textsuperscript{25} or Normalized Difference Vegetation Index – Enhanced Vegetation Index\textsuperscript{26} data). Additionally, metrics related to flooding due to sea-level rise\textsuperscript{27} in low-lying coastal areas should be added to the CEJST, given current and projected threats to potentially hazardous facilities and legacy clean-up sites that are disproportionately located in environmental justice communities.\textsuperscript{28}

5. **Integrate metrics of physical and social infrastructure.**
Justice40 programs will include significant infrastructure investments, which should be guided by more diverse infrastructure measures in the CEJST. We recommend developing a more robust infrastructure category that includes indicators related to transportation infrastructure and affordability (data could be secured from the Department of Transportation); digital infrastructure, such as internet and broadband access; banking services; food security (available from data sources such as PolicyMap\textsuperscript{29} and Simply Analytics\textsuperscript{30}); and affordable housing (data could be acquired from HUD and/or the National Housing Trust). In addition, we believe the CEJST should assess the availability of data to generate metrics that would identify severely deprived areas where communities are living in housing that lacks electricity, plumbing, or sewerage, particularly in rural areas, unincorporated areas, and colonias along the US-Mexico border (HUD may have such data). **CEQ should also assess whether national data sources are available to integrate industrial zoning information.**

6. **Enhance metrics of relevance to community health status.**
We encourage use of perinatal and maternal health outcomes, including low birthweight, small-for-gestational age, preterm birth, and severe maternal morbidity in the CEJST. The Centers for Disease Control and Prevention or the U.S. Department of Health and Human Services should be able to share these data. In addition, an indicator of a community’s health insurance status could be developed by using the percentage of people receiving Medicaid compared with its total Medicaid-eligible population. This metric can be obtained from the U.S. Census Bureau.

7. **Expand or enhance environmental hazard indicators.**
We encourage including a wider array of environmental hazards in the CEJST. As examples, national scale data sources exist for the following hazards:

\textsuperscript{23} Nardone, et al. “Redlines and Greenspace.” \texttt{doi: 10.1289/EHP7495}.
\textsuperscript{24} American Forests, Tree Equity Score, accessed July 23, 2022. \texttt{https://treeequityscore.org/}.
\textsuperscript{25} \texttt{https://www.mrlc.gov/data/nlcd-2019-land-cover-conus/}.
\textsuperscript{26} \texttt{https://modis.gsfc.nasa.gov/data/daprod/mod13.php/}.
\textsuperscript{27} Climate Central, Surging Seas Maps and Tools, accessed July 23, 2022. \texttt{https://sealevel.climatecentral.org/maps/}.
\textsuperscript{29} \texttt{https://www.policymap.com/features/access-data/}.
\textsuperscript{30} \texttt{https://simplyanalytics.com/}. 
A. **National Air Toxics Assessment (aka AirToxScreen)** or the **Risk-Screening Environmental Indicators Model** that more comprehensively characterize potential cancer and non-cancer hazards related to hazardous pollutants emitted into air, water, and soil.

B. **Concentrated animal feeding operations (CAFOs)** from EPA's Facility Registry Service database, as these facilities are of great relevance for community health and environmental justice, particularly for rural communities. CEQ should collaborate with EPA to push for better data on the location, size, and types of multiple CAFOs across the country.

C. **Oil and gas extraction activities**, including unconventional methods (such as hydraulic fracturing) pose significant environmental justice threats in rural and urban communities throughout the country and should therefore be included as a hazard. Enverus is a private service that aggregates data on oil and gas development activity from operators and state agencies across the United States that is also made available for research purposes.

D. **Mining sites from the Abandoned Mine Land Inventory System** as well as data on formerly used defense sites from the US Army Corp of Engineers should be added to the CEJST.

8. **Integrate measures of sensitive populations and receptors.**
   We recommend that CEJST include metrics of sensitive receptors of critical relevance for environmental justice, starting with K-12 schools (for which data are likely available from the Department of Education) and prisons (data are likely available from the Department of Justice).

9. **Add indicators of drinking water quality and sanitation.**
   While there is a paucity of high-quality spatial data on community and public water systems, the Environmental Policy Innovation Center has created the first comprehensive national dataset of drinking water service area boundaries for community water systems. We encourage CEQ to work with EPA and consider

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31. [https://www.epa.gov/AirToxScreen/2017-airtoxscreen/](https://www.epa.gov/AirToxScreen/2017-airtoxscreen/).
32. [https://www.epa.gov/rsei/](https://www.epa.gov/rsei/).
35. [https://www.enverus.com/](https://www.enverus.com/).
36. [https://eamlis.osmre.gov/](https://eamlis.osmre.gov/).
37. [https://fudsportal.usace.army.mil/](https://fudsportal.usace.army.mil/).
linking these boundaries with the federal Safe Drinking Water Information System data to enable the development of a national drinking water layer that could be added to the CEJST. These boundaries could also be used to estimate areas where communities are not likely to be served by community water systems and that are therefore reliant upon domestic wells. A method to estimate the location of these domestic well areas has been used in California\textsuperscript{41} and could be scaled up nationally through a collaboration between CEQ, EPA, and researchers working on water justice projects. To our knowledge, there are currently no national data available that identify where communities lack of access to sewerage and sanitation services—a significant environmental justice challenge in both urban and rural areas. We therefore strongly recommend that CEQ collaborate with US EPA, HUD, and USDA to address this critically important data gap.

10. Provide a cumulative impact metric.
Advancing environmental justice in policy and regulatory decision-making requires assessment and characterization of the cumulative impacts of environmental and social stressors that drive health disparities across racial, ethnic, and class lines. Although several state screening tools have valid methods for assessing cumulative impacts, the CEJST currently lacks such an approach. We recommend that CEJST address this critical data gap and derive a cumulative impact metric. Such an approach could adapt validated and peer-reviewed approaches that are used in existing screening tools, such as CalEnviroScreen.\textsuperscript{42} Any cumulative impact methodology should be developed with significant input from and in consultation with communities.

11. Provide a more transparent and accessible interface for timely user and community feedback on the CEJST.
The CEJST currently provides an online survey\textsuperscript{43} to solicit feedback from users and collect suggestions for additional data sources for the tool. However, we think this feedback element should be enhanced by allowing users to provide specific information about potential errors or data gaps on the site and by clarifying and making more transparent the process and timeline by which CEQ staff will respond to user queries, particularly when data errors have been identified. In addition, given common errors in large administrative datasets, CEQ will likely need to dedicate resources that enable its staff to engage directly with community organizations that identify data accuracy or data gap problems that could be collaboratively addressed through targeted ground-truthing of CEJST results, identification of additional or better data sources that improve accuracy of metrics, and other strategies. Finally, although the CEJST is


\textsuperscript{43} The survey is available at \url{https://www.surveymonkey.com/r/cejst-survey}. 
currently available in Spanish, CEQ needs to do more to enhance the accessibility of the tool for other non-English speakers.

We welcome an opportunity to discuss our recommendations with you, CEQ staff members, and members of the White House Environmental Justice Interagency Council.

Sincerely,

Richard Moore, WHEJAC Co-chair

Peggy M. Shepard, WHEJAC Co-chair

c: Members of the WHEJAC
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