

A Comprehensive Review and Appraisal of Frameworks, Methods, Metrics, and Data Used in Assessments of Communities with Environmental Justice Concerns

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This investigation will review and appraise the state of science in the areas of analytical frameworks, metrics, and analytical methods currently used or contemplated for future use in Environmental Justice impact assessments by the U.S. Environmental Protection Agency (EPA), individual States, and in relevant publications by academics. The focus will be to appraise these areas and develop recommendations for valuable contributions to the science, including in two categories identified by EPA Office of Research and Development (ORD) in their September 2022 cumulative impacts assessment research recommendations report: addressing scientific consideration for meeting partner needs and supporting science translation and delivery. This research will build from previous related work, and will include systematic literature review, and multidisciplinary expert elicitation using formal and structured methods. The overall objective is to develop information and recommendations to document and evaluate the state of current research, to identify new science, and to discern new research opportunities to support and supplement the EPA's Environmental Justice (EJ) assessment practices, particularly in cumulative impact assessment (CIA). The investigators will synthesize the findings of this research into a report consisting of transparent, well-documented findings and recommendations to improve the scientific basis of EJ assessments.

Implications: The goal is to apply the results of this research activity to inform potential research options that will provide the highest impact to improve the underlying science and assessment of EJ considerations.

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