

Expanding the  
Conversation



working for  
environmental  
justice

# EPA National Environmental Justice Community Engagement Call

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*January 25, 2022*

# Housekeeping



Please join by phone or computer, not both



You are on mute, please enter questions and comments into the Q&A pod



If selected to speak during dialogue, please limit comment to 1 minute



Recording and transcript will be available online in the near future

# En Español

Tenemos interpretación en español disponible para aquellos que prefieren escuchar en español.

- Cómo cambiar el canal de audio en español
- Las personas pueden agregar preguntas en español al módulo de preguntas y respuestas
- Los materiales de la reunión estarán disponibles en español.



*Spanish-language interpretation is available for those who prefer to listen in Spanish.*

- How to switch to Spanish language audio channel*
- Individuals can add questions in Spanish to the Q&A Pod*
- Meeting materials will be made available in Spanish.*

# Agenda

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Welcome  
Mindfulness Moment

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*EPA Leadership Updates*

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*Upcoming Regional Listening Sessions on EPA's Draft  
Lead Strategy*

*Air Monitoring Grants*

*Upcoming Pollution Prevention grant opportunities*

*Equity and EJ @ NASA's Earth Sciences*

*Listening Session and Dialogue*

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Upcoming Engagement Opportunities

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Closing Remarks

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***MINDFULNESS  
MOMENT***



mindful  
EPA

# Leadership Updates

***Matthew Tejada***

*DIRECTOR, EPA OFFICE OF ENVIRONMENTAL JUSTICE*

**U.S. Environmental Protection Agency's (EPA)  
Draft *Strategy to Reduce Lead Exposures and  
Disparities in U.S. Communities***

**Announcement of Upcoming Public Listening Sessions**

Presentation for the National EJ Community Engagement Call  
January 25, 2022

# Overview

- ▶ On October 28, 2021, EPA released the draft Strategy to Reduce Lead Exposures and Disparities in U.S. Communities (Lead Strategy) for public comment
  - ▶ Comment period open through March 16, 2022
- ▶ EPA is hosting virtual public comment sessions in each of its ten regional office areas from early February to early March 2022
  - ▶ The sessions will be an opportunity for the public to provide verbal input on the draft Lead Strategy to EPA
  - ▶ Will also provide information on how to submit written comments
- ▶ More information on the Lead Strategy and links to register for the listening sessions can be found here:
  - ▶ <https://www.epa.gov/lead/draft-strategy-reduce-lead-exposures-and-disparities-us-communities>



## What is the draft *Strategy to Reduce Lead Exposures and Disparities in U.S. Communities (Lead Strategy)*?

- ▶ The draft Lead Strategy lays out EPA and government-wide approaches to strengthen public health protections, address legacy lead contamination for communities with the greatest exposures and promote environmental justice
- ▶ The draft Lead Strategy identifies four goals and commits to take various actions to address key problems that contribute to lead exposure in communities:
  - ▶ Reduce Community Exposures to Lead Sources,
  - ▶ Identify Lead-Exposed Communities and Improve Their Health Outcomes,
  - ▶ Communicate More Effectively with Stakeholders, and
  - ▶ Support and Conduct Critical Research to Inform Efforts to Reduce Lead Exposures and Related Health Risks

# Why is the draft *Lead Strategy* important?

- ▶ Ongoing exposures to lead in the environment present a health risk to too many people nationwide
- ▶ Very low levels of lead in children's blood have been linked to adverse effects on intellect, concentration, and academic achievement
- ▶ The U.S. has made substantial progress in reducing lead exposure, but significant disparities remain along racial, ethnic, and socioeconomic lines
- ▶ EPA developed the Lead Strategy to focus on eliminating these disparities by taking targeted actions to prevent childhood exposures that could lead to lifelong health effects and barriers to social and economic well-being

# Why is EPA asking for public comments and what kind of information is helpful?

- ▶ Public comments will help the Agency develop a final Lead Strategy that reflects the input and priorities of the people who it is intended to benefit
- ▶ EPA is asking for people to describe in their own words what actions will help address lead in their communities
- ▶ It will be most helpful if people can provide specific suggestions on how the draft Lead Strategy can be improved

# Regional Listening Session Schedule

(all sessions begin at 6pm local time)

Region	Date (time)
R10 (AK, ID, OR, WA)	February 8 (6pm PST)
R2 (NJ, NY, PR, VI)	February 10 (6pm EST)
R6 (AR, LA, NM, OK, TX)	February 15 (6pm CST)
R5 (IL, IN, MI, MN, OH, WI)	February 17 (6pm CST)
R9 (AZ, CA, HI, NV, AS, GU)	February 22 (6pm PST)
R4 (AL, FL, GA, KY, MS, NC, SC, TN)	February 24 (6pm EST)
R8 (CO, MT, ND, SD, UT)	March 1 (6pm MST)
R7 (IA, KS, MO, NE)	March 3 (6pm CST)
R1 (CT, ME, MA, NH, RI, VT)	March 8 (6pm EST)
R3 (DE, DC, MD, PA, VA, WV)	March 9 (6pm EST)

# More Information:

- ▶ EPA's Lead Strategy website and links to register for the listening sessions can be found here:
  - ▶ <https://www.epa.gov/lead/draft-strategy-reduce-lead-exposures-and-disparities-us-communities>
- ▶ When you register to attend a listening session, you can sign up to provide verbal comment during the session
  - ▶ Speaking slots are 3 minutes
  - ▶ Interpretation and disability access accommodations will be provided
- ▶ Thank you!

A large, faint watermark of the Environmental Protection Agency (EPA) logo is centered in the background. The logo consists of a circular seal with the words "UNITED STATES" at the top and "ENVIRONMENTAL PROTECTION AGENCY" at the bottom. In the center of the seal is a stylized flower with three leaves.

**American Rescue Plan:  
Grant Competition for Air  
Pollution Monitoring in  
Communities**

# Summary



- The funding is for eligible entities to conduct ambient air monitoring of pollutants of greatest concern in communities with environmental and health outcome disparities stemming from pollution and the COVID-19 pandemic.
- The goals of the competition:
  - Enhance air quality monitoring in and near underserved communities across the United States.
  - Support community and local efforts to monitor their own air quality and to promote air quality monitoring partnerships between communities and tribal, state, and local governments.

# Funding Amounts



- Estimated total funding - **\$20 million**
- Maximum funding requested per application
  - **\$25,000 to \$100,000** ‘Small Grants’ (approx. 20-30 awarded)
  - **\$100,000 to \$500,000** ‘Large Grants’ (approx. 30-40 awarded)
  - Should be commensurate with the proposed activities
- Set-asides:
  - Approximately **\$2 million for tribal governments**
  - Approximately **\$2 million for community-based organizations**
  - Applications for each set-aside will be reviewed and ranked separately
  - EPA may increase or decrease the amounts and number of projects selected under each set-aside based on the number of meritorious applications received, agency priorities, funding availability, and other applicable considerations



# Who Can Apply?



Applications will be accepted from

- States (including the District of Columbia)
- Local governments
- U.S. territories and possessions
- Indian tribes
- Public or private nonprofit organizations
- Public and private hospitals and laboratories
  
- Note that eligible entities can partner with ineligible entities under EPA's Subaward Policy: <https://www.epa.gov/grants/grants-policy-issuance-gpi-16-01-epa-subaward-policy-epa-assistance-agreement-recipients>.



- RFA at: <https://www.epa.gov/grants/enhanced-air-quality-monitoring-communities>
  - Applications due Friday, **March 25, 2022** 11:59PM ET, via Grants.gov: <https://www.grants.gov/web/grants/view-opportunity.html?oppld=336951>
  - Submit questions via email to [AirMonitoring@epa.gov](mailto:AirMonitoring@epa.gov) by **March 18<sup>th</sup>, 2022**
  - RFA Information Session Recording with Full Set of Slides is available at <https://www.epa.gov/grants/enhanced-air-quality-monitoring-communities>
  - Introduction to EPA Grants Webinar is available at <https://www.epa.gov/arp/enhanced-air-quality-monitoring-funding-under-arp>



*Bipartisan Infrastructure Law (BIL) Implementation*

# **Pollution Prevention (P2) Grants**

January 25, 2022



# Pollution Prevention (P2) Grants Background

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- Authorized by the Pollution Prevention Act of 1990 – These State, Tribal and Assistance Grants (STAG) have promoted source reduction (or P2) assistance to businesses for more than 30 years.
- The total funding for these grants per year, until now, has been in the range of \$4.5 to \$6 million.
- Individual grant awards in the range of \$20K to \$250K
- Despite the “small” grants, we’ve achieved “big” results. From 2011-2019:
  - \$1.9 billion savings for businesses
  - 706 million pounds of hazardous material reduced
  - 16.9 million metric tons of greenhouse gases eliminated



# BIL and the Expansion of P2 Grants

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- With an additional \$100 million authorized over 5 years (\$20 million per year), the BIL quadruples the size of the P2 grant program.
- We still have an ongoing, separate \$4.6 million appropriation for P2 grants
- What's the same between these two grant pots of money:
  - Both sets of grants are competitive and can only go to states, Tribes, and state/Tribe sponsored institutions (e.g., colleges and universities)
  - Both sets of grants must be intended for source reduction assistance to businesses
- What's different:
  - There is no match requirement for the BIL funds, thereby increasing access



## What's Our Vision Now for the P2 Grants

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- Because we cannot mix the BIL P2 grant funds with our ongoing P2 grant funds, we will continue to maintain a separate P2 grants program with those non-BIL funds.
- EPA will develop a portfolio of grants -- all of which will have a focus on EJ.
- The focus on EJ will not only be to promote source reduction efforts among businesses in EJ communities but also to:
  - Encourage grant applications from tribes and tribal colleges and minority-serving, state colleges and universities
  - Reach out to minority serving institutions in recruiting EPA job candidates for implementing the BIL's expansion of the P2 grants program



## What's Next (FY 22)

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February 2022: Publish two Requests for Applications (RFAs) – one set of grants to be funded under our regular appropriation and the other to be funded by the BIL.

- Both RFAs will fund two-year grants.
- Both RFAs will expand the reach of the current sector-based P2 Grants to support source reduction among businesses in EJ communities by adding explicit evaluation criteria on how the grant applicant intends to use P2 technical assistance to benefit underserved communities..
- Both RFAs will include a new National Emphasis Area (only available to federally-recognized tribes and intertribal consortia) to support P2 technical assistance among businesses in Indian Country.
- Applicants will have access to a new, P2 Program EJ-focused mapping tool -- developed to help applicants identify industrial facilities that are in or adjacent to an underserved community
- Grant awards should be made by late summer/fall 2022



## What's Next (FY 23)

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- EPA intends to *introduce two additional, two-year P2 grant programs in FY 23 to focus more intensively on advancing EJ priorities. These two grant programs are anticipated to:*
  - *Leverage TRI and other Agency reporting, as well as census data, to identify businesses in (or proximal to) EJ communities and promote adoption of P2 practices in the sectors those facilities represent.*
  - *Leverage EPA's environmentally preferable purchasing tools to increase institutional and consumer access to safer and more sustainable products in EJ communities.*
- These new grant programs will place the Biden Administration's EJ and Justice40 initiatives at the center of BIL's P2 Grant funding.





EARTH SCIENCE  
APPLIED SCIENCES

January 25, 2022

# Equity & Environmental Justice at NASA's Earth Science

Nancy D. Searby, Ph.D.

Sydney Neugebauer

**Supported by:**

Kenton Ross, Ph.D.

Aaron Piña, Ph.D.

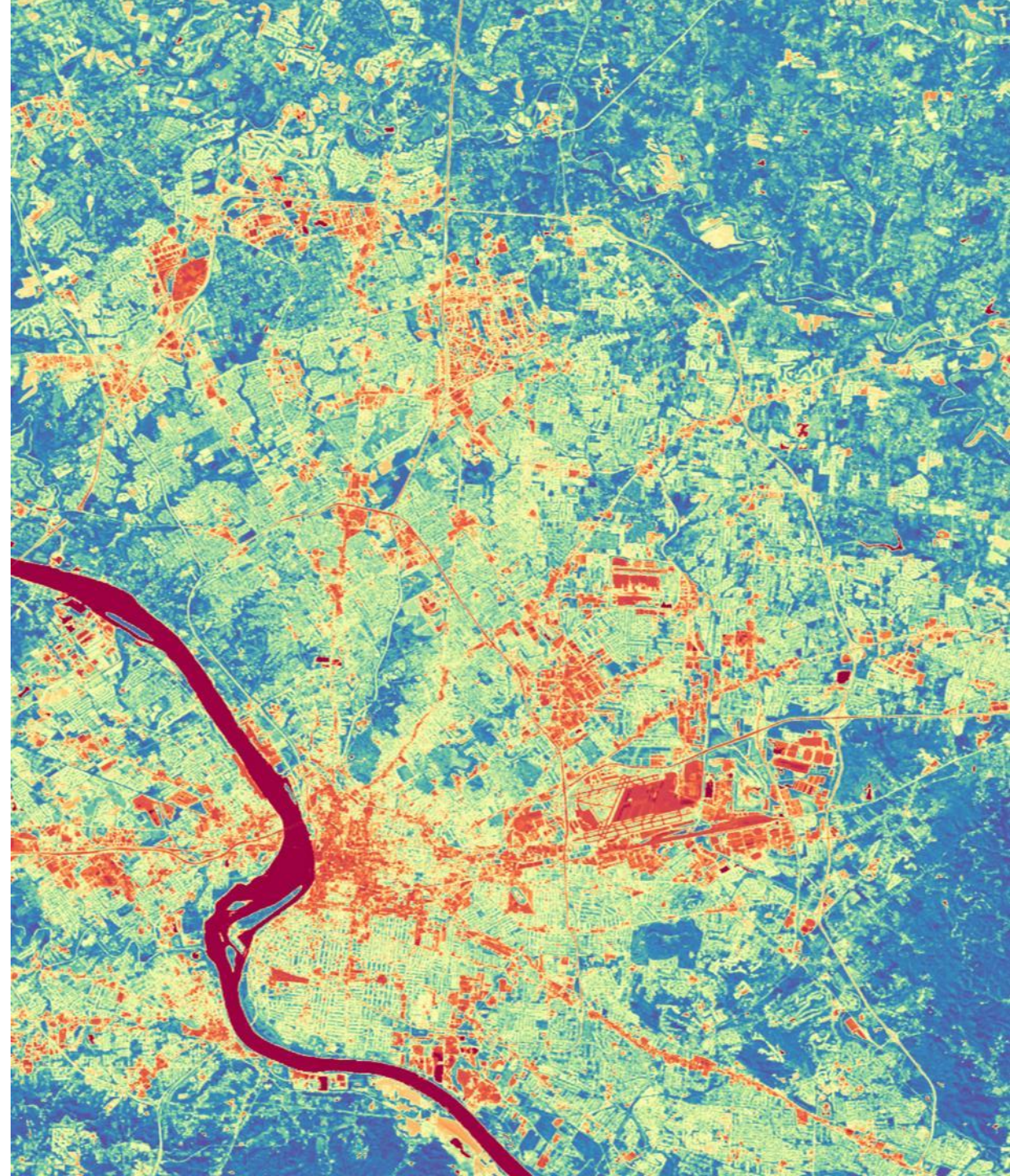
Yáitza Luna-Cruz, Ph.D.

Lauren Childs-Gleason



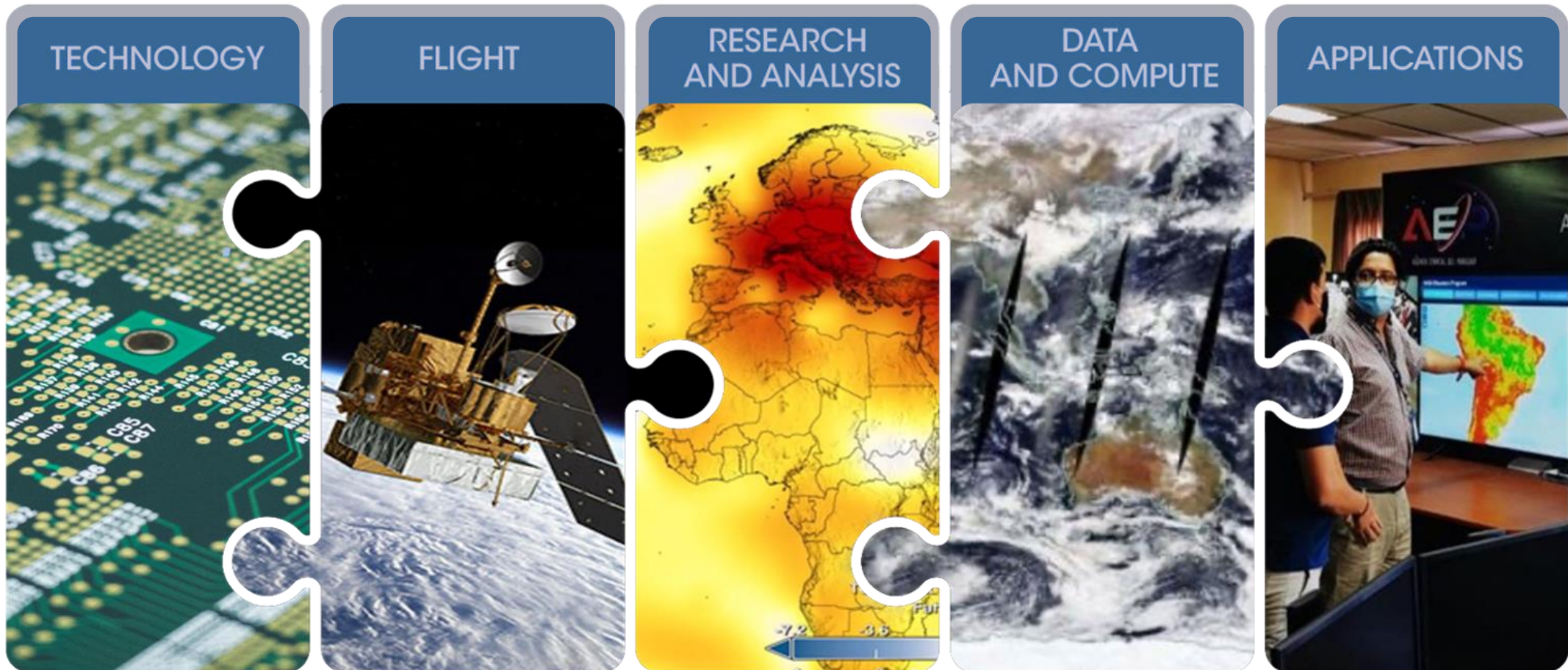
# OUTLINE

- What does NASA have to do with Environmental Justice (EJ)?
- NASA Equity & EJ Solicitation information
- DEVELOP builds workforce with EJ projects
- Learn about NASA data at upcoming UNBOUND workshop
- Summary of upcoming activities



## NASA'S EARTH SCIENCE DIVISION

Using the global vantage point of space, ESD builds fundamental, scientific knowledge about Earth and how it is changing. ESD advances understanding of Earth as an integrated system and develops and tests applications that deliver direct societal benefit.



# NASA'S EARTH SCIENCE DIVISION: EARTH OBSERVING FLEET

National Aeronautics and Space Administration



## EARTH FLEET

### INVEST/CUBESATS

- TEMPEST-D 2021
- CSIM-FD 2023
- HARP 2020
- CIRIS 2022
- CTIM\* 2023
- HYTI\* 2021
- SNOOPI\* 2023
- NACHOS\* 2023

### JPSS INSTRUMENTS

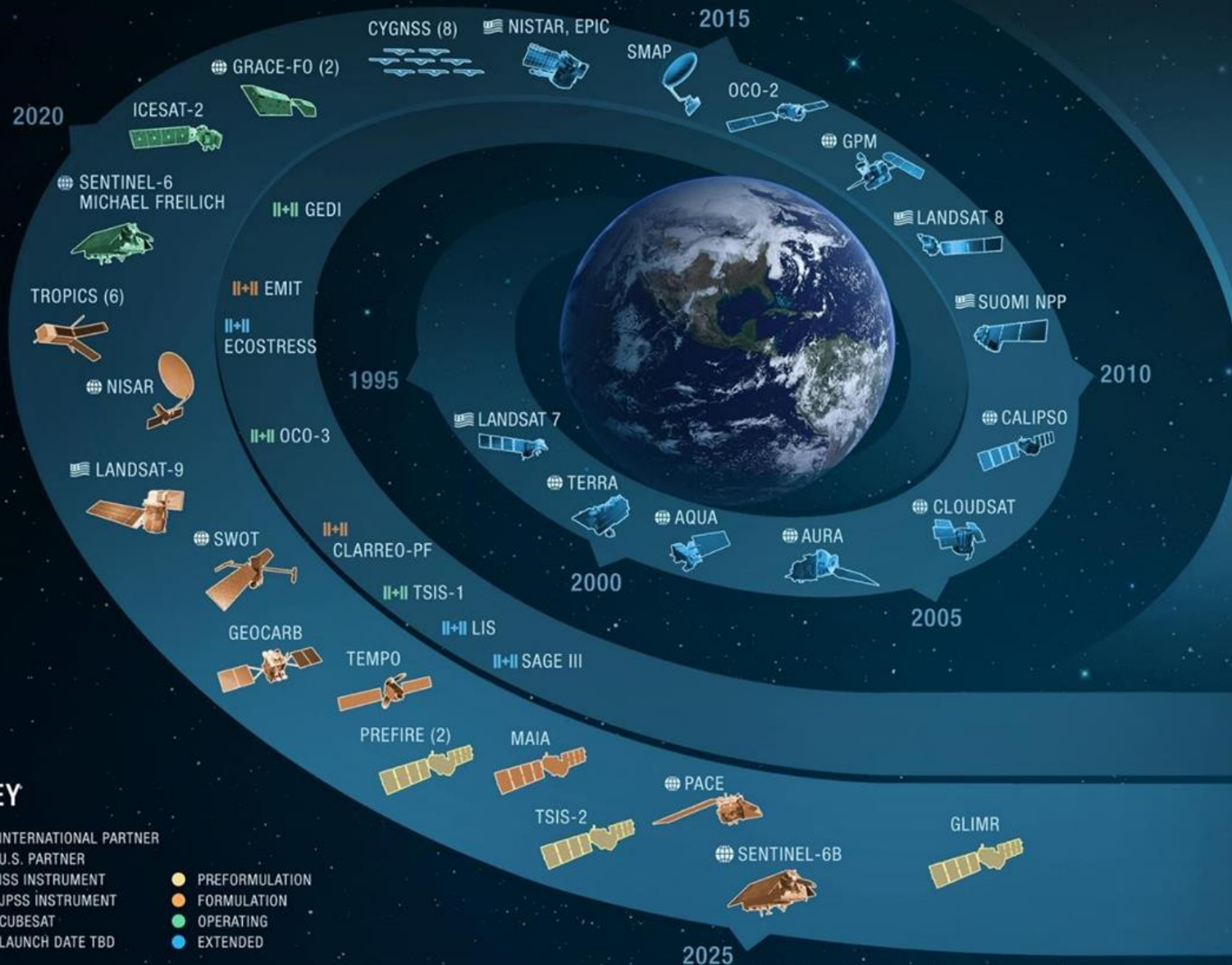
- OMPS-LIMB 2022
- LIBERA 2027

### ISS INSTRUMENTS

### MISSIONS

### KEY

- INTERNATIONAL PARTNER
- U.S. PARTNER
- ISS INSTRUMENT
- JPSS INSTRUMENT
- CUBESAT
- LAUNCH DATE TBD
- PREFORMULATION
- FORMULATION
- OPERATING
- EXTENDED



## EMPOWERING PEOPLE & COMMUNITIES

# Making Earth Data Accessible to All

NASA's Capacity Building Program provides individuals and institutions with workforce development, training activities, and collaborative projects to strengthen understanding of Earth observations and expand their use around the world.

We work with everyone at every level — from first-time users to long-time professional users of Earth observation data.

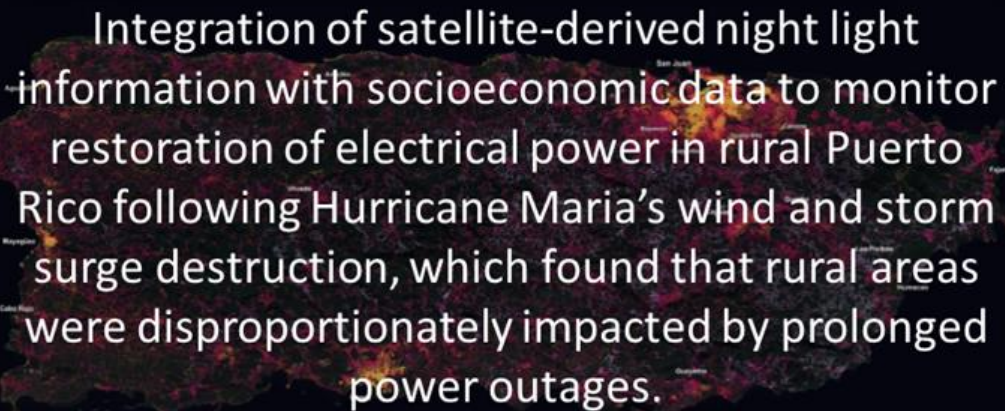
Elements:

- ARSET
- DEVELOP
- SERVIR
- Indigenous Peoples
- Prizes & Challenges
- Equity and Environmental Justice

<https://appliedsciences.nasa.gov/what-we-do/capacity-building>



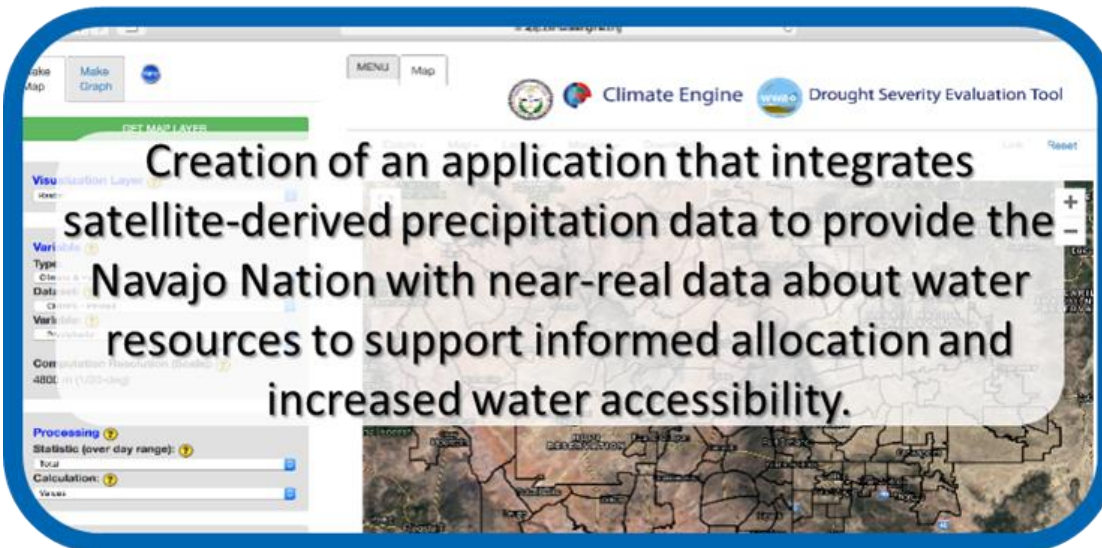
## EXAMPLES OF EEJ @ NASA EARTH



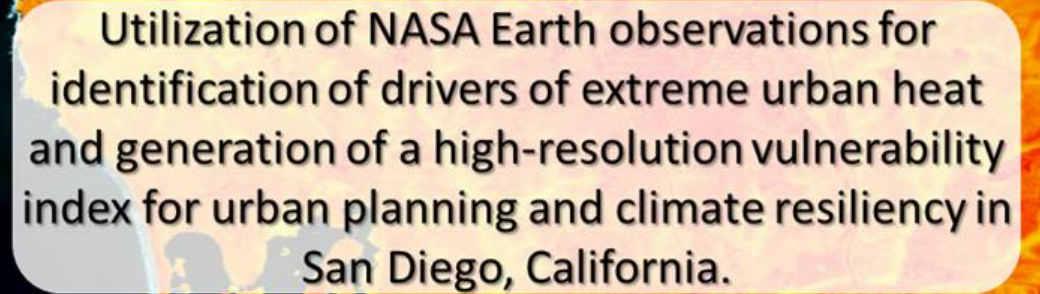
Integration of satellite-derived night light information with socioeconomic data to monitor restoration of electrical power in rural Puerto Rico following Hurricane Maria's wind and storm surge destruction, which found that rural areas were disproportionately impacted by prolonged power outages.



Pairing sea surface height information derived from satellites with demographic data for Norfolk, Virginia to understand disparities seen by communities of color and lower economic status in negative impacts of sea level rise.



Creation of an application that integrates satellite-derived precipitation data to provide the Navajo Nation with near-real data about water resources to support informed allocation and increased water accessibility.



Utilization of NASA Earth observations for identification of drivers of extreme urban heat and generation of a high-resolution vulnerability index for urban planning and climate resiliency in San Diego, California.

## EEJ OPPORTUNITIES

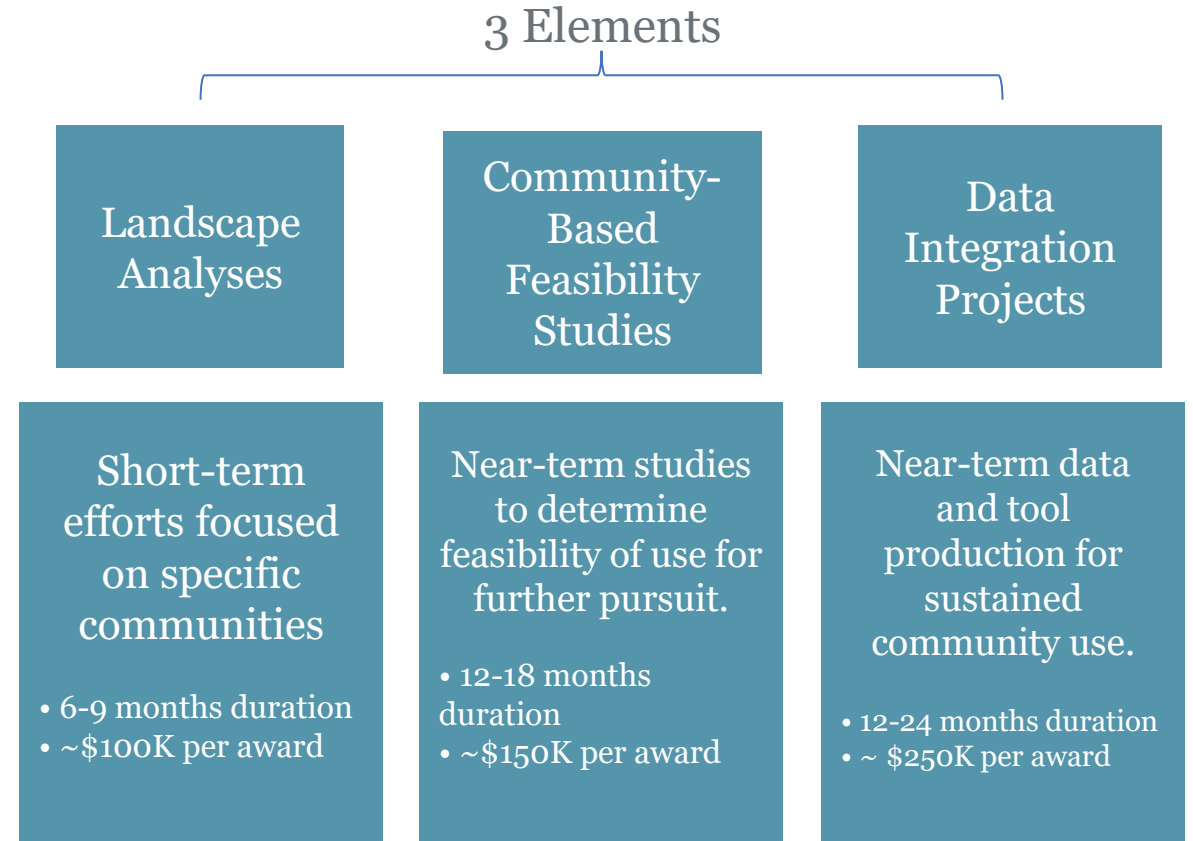
# Equity & Environmental Justice Solicitation

**Goal:** Advance progress on equity and environmental justice (EEJ) **domestically** through the application of Earth science, geospatial, and socioeconomic information.

- Need to develop and learn from relationships with EJ communities and organizations that work alongside these communities.
- Connect to organizations addressing EEJ issues that would benefit from the insights offered by NASA Earth science information.

Especially interested in proposals from or partnered with:

- Non-Federal domestic organizations
- Community-based non-profit institutions
- Tribal governments
- Local governments
- Academic institutions



<https://science.nasa.gov/researchers/solicitations/roses-2021/amendment-52-new-opportunity-roses-a49-earth-science-applications-equity-and-environmental-justice>

# LANDSCAPE ANALYSIS EXAMPLES

Some examples of different approaches to landscape analysis:



*Landscape Assessment from the Tishman Environment and Design Center:*

## Environmental Justice Movement: Priorities, Strategies & Just Transition – Landscape Assessment

For more information, visit:  
[https://static1.squarespace.com/static/5d14dab43967cc000179f3d2/t/5e54197ccce4a125611a7d0d/1582569853403/EJM\\_Landscape+Assessment\\_2.24.20.pdf](https://static1.squarespace.com/static/5d14dab43967cc000179f3d2/t/5e54197ccce4a125611a7d0d/1582569853403/EJM_Landscape+Assessment_2.24.20.pdf)

*National Scan from the Tishman Environment and Design Center:*

## Local Policies for Environmental Justice

For more information, visit:  
[https://static1.squarespace.com/static/5d14dab43967cc000179f3d2/t/5d5c4bd0e1d5150001a5a919/1566329811163/NRDC\\_FinalReport\\_04.15.2019.pdf](https://static1.squarespace.com/static/5d14dab43967cc000179f3d2/t/5d5c4bd0e1d5150001a5a919/1566329811163/NRDC_FinalReport_04.15.2019.pdf)

*Expert analysis article on Law360:*

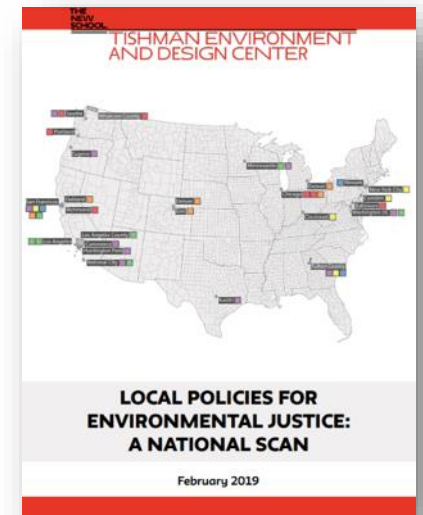
## How The Environmental Justice Landscape Is Evolving

For more information, visit:  
<https://www.law360.com/articles/1324347/how-the-environmental-justice-landscape-is-evolving>

*Peer-reviewed publication from the US National Library of Medicine National Institutes of Health:*

## Ecological Information Needs for Environmental Justice

For more information, visit:  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4300133/pdf/nihms577556.pdf>





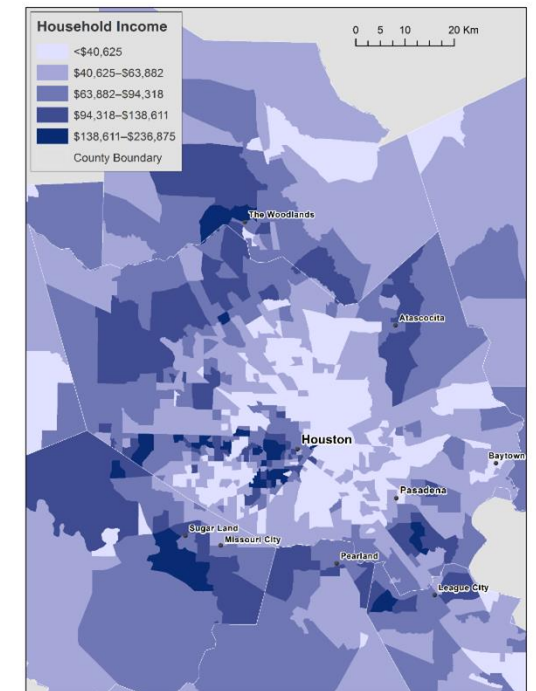
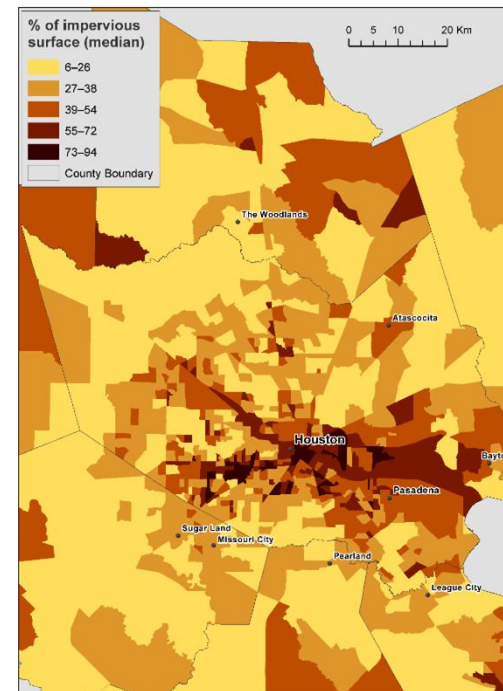
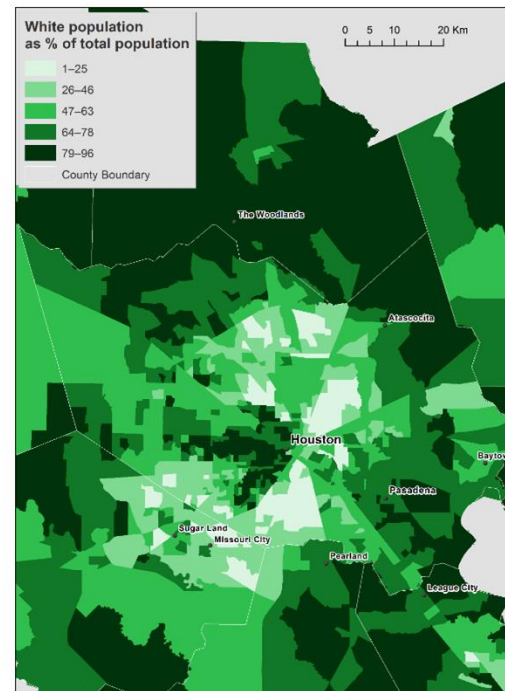
## DATA INTEGRATION PROJECT EXAMPLE

# Race, Income Inequality, and Impervious Surfaces in Relation to Flooding Associated with Hurricane Harvey

The Center for International Earth Science Information Network (CIESIN) at the Earth Institute at Columbia University conducted a project that combined satellite-derived flooding and impervious surface measurements with socioeconomic datasets to understand impacts of Hurricane Harvey's flooding of Houston, Texas in 2017.

The project found that Hurricane Harvey flooding was an “equal opportunity” disaster with predominantly white, higher income neighborhoods more likely to be flooded than more racially mixed and lower income neighborhoods.

There was a positive correlation between the percent of population that is elderly and both average flood depth and flood extent, meaning the elderly were slightly more likely to be exposed to flooding.



## COMMUNITY-BASED FEASIBILITY PROJECT EXAMPLE

### Utilizing NASA Earth observations to identify drivers of extreme urban heat and generate a high-resolution vulnerability index for urban planning and climate resiliency in San Diego, California

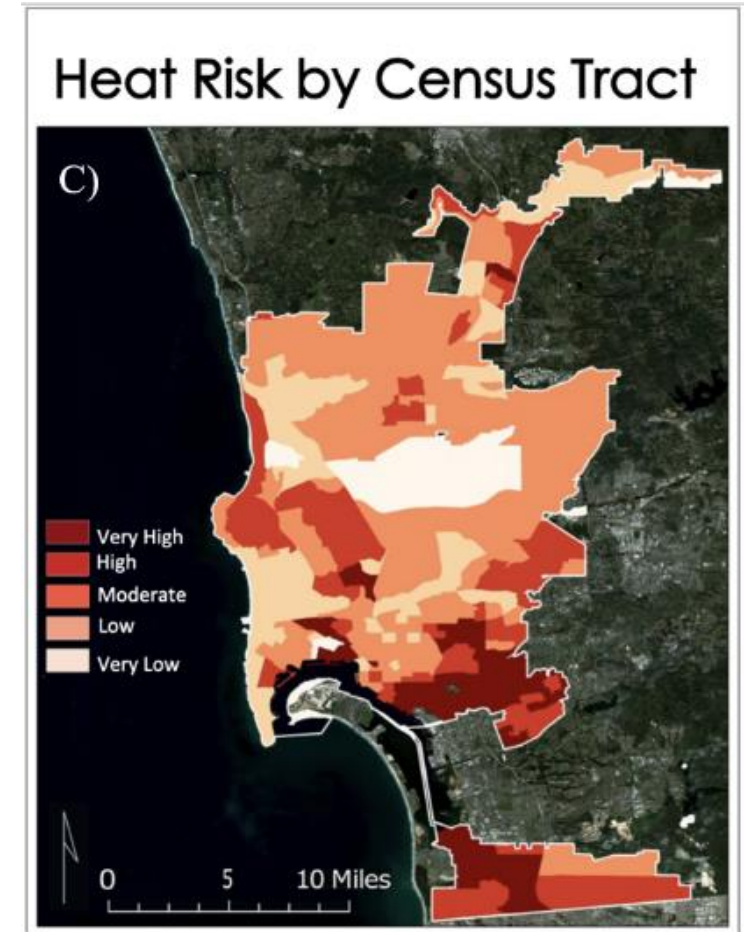
Exposure to heat is a growing concern for the City of San Diego, California and its 1.4 million residents. Excess heat can cause increased heat-related morbidity, mortality, and energy costs.

Vulnerability to heat-related illnesses is often correlated to demographics, socioeconomic status, and pre-existing health conditions. The burden of urban heat is also not equal amongst communities; areas with lower income and communities of color bear a disproportionate burden.

NASA DEVELOP worked with the City of San Diego to use satellite imagery to identify areas of highest heat based on land surface temperature. The team mapped heat vulnerability, heat exposure, and comprehensive heat risk by census tract to help inform the City of San Diego's development of the Climate Resilient San Diego plan and prioritize at-risk communities for cooling interventions.

For more information, visit:

<https://develop.larc.nasa.gov/2021/spring/SanDiegoUrbanDev.html>



## WHO CAN PROPOSE?

### **NASA's Guidebook for Proposers, Appendix B states:**

“NASA accepts proposals submitted in response to its NOFOs (Notice of Funding Opportunity) by most types of U.S. organizations acting on behalf of the PI(s).....”

This includes institutes of higher education, educational institutions, non-profit organizations, commercial organizations, NASA Centers, other Federal agencies, federally funded research and development centers, non-US organizations, state and local governments, and tribal organizations.

We are *especially* interested in proposals from or partnered with non-Federal domestic organizations, community-based non-profit institutions, tribal governments, local governments, and academic institutions active in addressing EEJ issues that would benefit from the insights offered by NASA Earth science information.

*More information available at solicitation link under Other Documents, including proposer telecon slides and Q&A*

Wondering if you're eligible? Just ask!

Need help? See  
<https://science.nasa.gov/researchers/sara/how-to-guide>

## EARLY CAREER WORKFORCE DEVELOPMENT

# DEVELOP

DEVELOP addresses environmental issues through interdisciplinary research projects that apply NASA Earth observations to community concerns.

DEVELOP **builds capacity** in participants (recent graduates, students, and transitioning professionals) and partner orgs (ex. local govt., NGOs, etc.) to use Earth observations.



## Thematic Areas



Health & Air Quality



Energy



Urban  
Development



Disasters



Ecological  
Forecasting

**New  
Area**

Climate



Agriculture



Water  
Resources

**New  
Area**

Wildfires

## Capacity Building Approach:

- Rapid (10 week) feasibility studies
- Focused on user needs and priorities
- Highlight the capabilities of freely-available NASA satellite data
- Interdisciplinary teams

## EEJ Efforts

- Work with EJ communities and organizations (ex. GroundworkUSA)
- Listening projects pilot in the spring

<https://develop.larc.nasa.gov/>



## **Training: Earth Observations (EO) Toolkit for Sustainable Cities & Human Settlements**

Part 1: Introduction to the EO Toolkit for Sustainable Cities and Human Settlements

Part 2: Applications of the EO Toolkit to Measure and Analyze Sustainable Development Goals

Part 3: Use Cases from the National and City Level

Thursdays, January 27, February 3 & 10, 2022

[English Session](#): 10:00 - 11:30 EST (UTC-5) | [Spanish Session](#): 13:00 - 14:30 EST (UTC-5)

Register at <https://appliedsciences.nasa.gov/join-mission/training/english/arset-earth-observations-toolkit-sustainable-cities-and-human>



**SCAN TO LEARN MORE:**

**GOAL:**

Increase data awareness and improve data availability, resolution, and ease of use



**Environmental Justice Data Backgrounder**

**Current & Upcoming EJ Activities**

**CURRENT:**

- EJ Data Backgrounder
- Open Source Science Initiative

**UPCOMING:**

- **Spring 2022:** Earth Science Data discovery for Environmental Justice – Student Intern Project
- **\*March 2022:** EO Dashboard – EJ stories in collaboration with SEDAC
- **April 2022:** Understanding Needs to Broaden Outside Use of NASA Data (UNBOUND) Workshop for Environmental Justice  
**UNBOUND** is a series of workshops to identify and engage data practitioners who are not currently using NASA data



**NASA TOPS Open Source Science**



**Earth Observing Dashboard**

## EARLY CAREER WORKFORCE DEVELOPMENT

# Current and Upcoming Opportunities

## EEJ Solicitation (ROSES-2021, A.49)

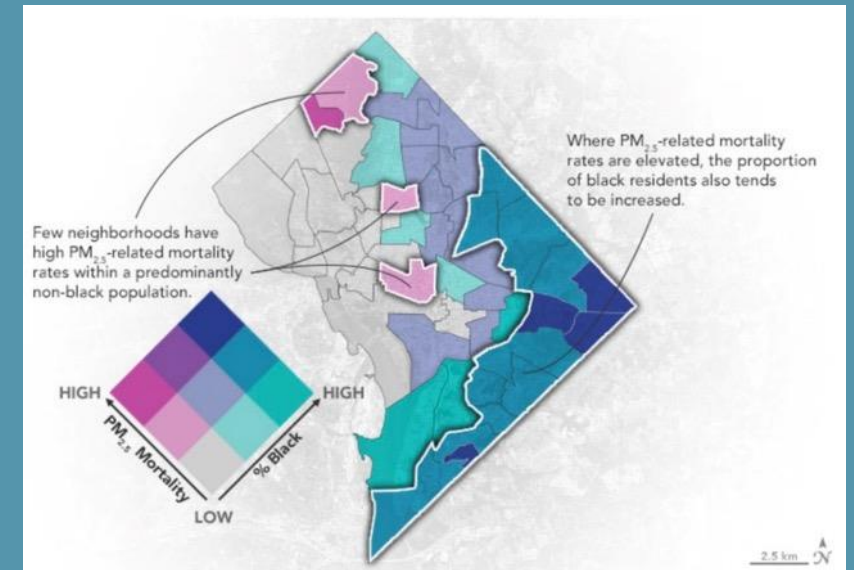
- Proposers' Telecon: **February 17, 2022**
- Proposals due **March 18, 2022**
- Selections expected: **Summer 2022**
- **We're seeking qualified reviewers to serve on the panel!** Email [nancy.d.searby@nasa.gov](mailto:nancy.d.searby@nasa.gov) to register your interest.

## DEVELOP projects

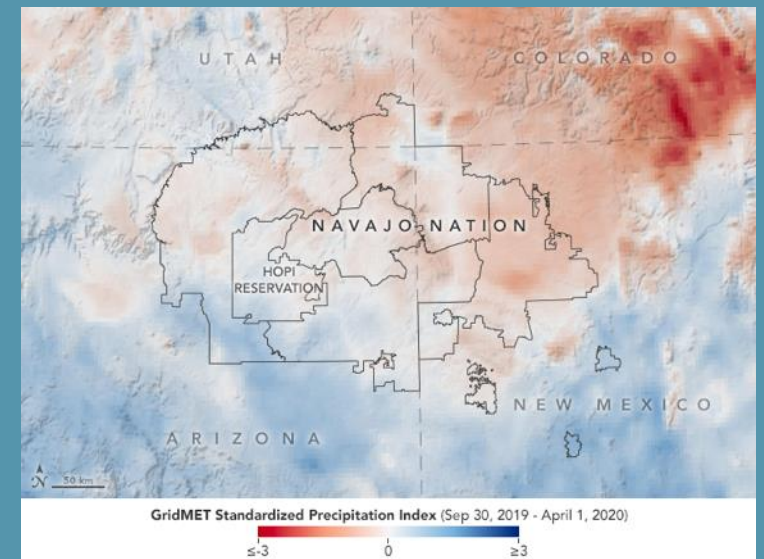
- Partner on feasibility studies or listening projects
- Currently planning or Fall 2022 (September – November)

## UNBOUND Workshop for Environmental Justice

- **April 2022:** Understanding Needs to Broaden Outside Use of NASA Data (UNBOUND) Workshop for Environmental Justice



For further information, please visit:  
<https://science.nasa.gov/earth-science/equity-and-environmental-justice>





# Thank You.

For further information, please visit:  
<https://science.nasa.gov/earth-science/equity-and-environmental-justice>



EARTH SCIENCE  
APPLIED SCIENCES





# Listening Session & Dialogue

## WRITE

WRITE ANY  
COMMENTS/QUESTIONS  
IN THE Q&A POD

## RAISE

WHEN PROMPTED,  
RAISE YOUR HAND TO  
ASK A QUESTION OR  
PROVIDE INPUT

- USING A PHONE? PRESS  
\*9 TO RAISE YOUR HAND

## LIMIT

PLEASE LIMIT  
QUESTIONS OR  
COMMENTS TO 1  
MINUTE

# Upcoming Engagement and Training Opportunities

# Upcoming Engagement Opportunities

## Superfund Redevelopment Mapper Tool and Training Webinar

- **January 26, 1 p.m. to 3 p.m. Eastern:** EPA is launching a new GIS-based tool to help local, state and tribal governments, community development organizations, developers and community members explore reusing and redeveloping land on or near Superfund sites.
- **Register here:** <https://clu-in.org/conf/tio/superfund-redevelopment/>

# Closing

- ❑ **Next National EJ Community Engagement call:**
  - February 22, 2022, at 2 p.m. Eastern
    - EJScreen 2.0: What's New in EPA's Environmental Justice Screening Tool
    - Update on EPA's Strategies to Incorporate Environmental Justice into Enforcement and Compliance Assurance Work
    - <https://www.epa.gov/environmentaljustice/national-environmental-justice-community-engagement-calls>
- ❑ **Subscribe to EPA's Environmental Justice listserv:**
  - For up-to-date information about EJ funding opportunities, events, and webinars:
  - Send a blank email to: [join-epa-ej@lists.epa.gov](mailto:join-epa-ej@lists.epa.gov)
- ❑ **Follow us on Twitter:**
  - @EPAEnvJustice
- ❑ **Send follow-up questions or comments to:**
  - [Environmental-Justice@epa.gov](mailto:Environmental-Justice@epa.gov)

